CHAPTER 3

RESEARCH METHODOLOGY

3.0 INTRODUCTION

Research methodology is the systematic method/process dealing with identifying problem, collecting facts or data, analyzing these data and reaching at certain conclusion either in the form of solutions towards the problem concerned or certain generalization for some theoretical formulation. Moreover, research methodology describes the methods used to collect the data and analyzed it by following the research design, sampling technique, measurement and instrumentation, data collection, conceptual framework and data analysis. It also comprised of a number of alternative approaches and inter-related and frequently overlapping procedures and practices. Since there are many aspects of research methodology, the line of action has to be chosen from a variety of alternative. The choice of suitable method can be arrived at through assessment of objectives and comparison of various alternatives.

In this chapter the philosophical stance of the researcher is explored which will clarify the reasons for the choice of methodology used in this research. Therefore, the main purpose of this chapter is to present the research methodology and methods used in this study in order to answer the research questions and to achieve the research objectives.

The chapter begins with the elements of the research process which include research design, area of study and sample design. Subsequently, the chapter explains the sources of data and the research instrument. The steps involved were elaborated in detail and had been carried out systematically in order to achieve a high degree of reliability and validity.
3.1 RESEARCH DESIGN:

Research design is a master plan specifying the methods and procedures guiding researcher to collect their data and analysis for their research. The most common research designs that the researchers always uses is exploratory, descriptive and causal. In the present study, exploratory and descriptive study is used as a purpose of the study to obtain and analyse the data.

Exploratory study is important for obtaining a good grasp of the phenomena of interest and for advancing knowledge through good theory building and hypotheses testing. In this study, the exploratory research includes literature reviews in order to gain more detailed information about the research problems and issues related with the shoppers’ perception of service quality in organised retail. Descriptive research is typically more formal and structured than Exploratory research (Malhotra, 2005). It is based on large, representative samples and the data obtained are subjected to quantitative analysis. The findings from this research are used as input into managerial decision making. In this study, descriptive study is undertaken in order to ascertain and describe the characteristics of the variables of the customers’ perceptions about the service quality provided by organised retailers, leading to customer loyalty. Thus, the present study is Exploratory-cum-Descriptive in nature as it endeavours to assess the relationship between service quality and customer loyalty in the formation of customers’ repurchases intention.

3.2 AREA OF STUDY:

The sample was selected from National Capital Region (NCR). NCR comprises the 6 major zones. The metropolitan area which encompasses the entire National Capital Territory of Delhi as well as urban area arising it in neighbouring states of Haryana, Uttar Pradesh and Rajasthan which includes Delhi, Gurgaon, Noida-Greater Noida, Ghazibad, and Faridabad. Delhi zone includes North Delhi, South Delhi, West Delhi and East Delhi. Gurgaon includes NH-8, MG Road and Sohna Road. Noida- Greater Noida includes sector-18, sector 25A, sector 38A and Pari Chowk. Ghaziabad includes Indirapuram, Vaishali, Kaushambhi and Mohan Nagar. Faridabad includes sector 12, sector 15, sector 20 and Mathura Road. The National Capital Territory of Delhi region is the oldest hub in northern India. NCR accounts for the highest market share in retail spending in the entire northern belt.
The total cumulative stock of mall space in Delhi-NCR is about 17.87 mn sq. ft. (Knight Frank Research). Delhi has the largest share of about 36% in total mall space of NCR. Gurgaon has a share of 29%, Noida-Greater Noida with a share of 15%, Ghaziabad with a share of 12% and Faridabad with a share of 8% in total mall space of NCR.

NCR was pioneer in introduction of shop-in-shop (SIS) in India and consequently has a greater degree of stability in consumer expectations as compared to other cities. It was important to ensure that findings of the study are not very ‘short-term’ retail evolution stage specific (Woodruffe, Eccles and Elliott, 2002).

3.3 SAMPLE DESIGN:

The population comprised retail shoppers as defined in similar studies (Kaul, 2007; Boshoff and Terblanche, 1997; Dabholkar, Thorpe, and Rentz, 1996). But, in most of the research studies, it became almost impossible to examine the entire universe; the only alternative thus is to resort to sampling. The present study is also of the same nature.

A sample is taken from the target population being researched. A sample is a part of the population which is studied in order to make inferences about the whole population. If the sample is adequate it will have the same characteristics of the population (Zikmund, 2003) and the findings are usually used to make conclusions about the population. Thus a good sample is a miniature version of the population and good sample design involves the following:

- Sample Unit
- Sample Techniques
- Sampling Size

3.3.1 Sample Unit:

Since the objective of the present study is to analyze the factors of service quality that lead to customer loyalty in purview of Indian organized apparel retail; active garments shoppers of SIS (shop-in-shop) is taken as the sample unit.

Active garments shoppers from SIS were selected as the respondent base because the retail format SIS includes the rest of three formats i.e. MBO (Multi-brand outlets), LFR (Large format retailer) and Exclusive Outlets.
3.3.2 Sampling Technique:

Sampling techniques are methods used to select a sample from the population by reducing it to a more manageable size (Saunders, Lewis & Thornhill, 2007). According to de Leeuw, Hox and Dillman (2008) these sampling techniques are used when inferences are made about the target population. In the present study, Simple Random Sampling was used for the selection of shop-in-shop (SIS) whereas Judgmental Sampling was used for the selection of respondents from shop-in-shop (SIS).

Utmost care has been taken to take respondents from various demographic profiles. Research assistants were instructed to screen respondents as to whether or not they had shopped for apparel in any SIS within the last three months to ensure an up-to-date evaluation of service quality and its impact on customer loyalty intentions.

3.3.3 Sample Size:

Sample size has an effect on how the sample findings accurately represent the population (Burns & Bush, 2010). The larger the sample is, the more likely that the generalisations are an accurate reflection of the population (Saunders, Lewis & Thornhill, 2009). Tabachnick and Fidell (2007) established that a sample size of 300 is adequate for factor analysis and for regression analysis a sample size of \( N \geq 50 + 8*M \) is adequate where \( M \) is the number of independent variables. In general, there has been an understanding among authors of statistical books that the larger the sample the more appropriate it is for factor analysis (Pallant, 2007). Hair (2006) suggested that a sample size larger than 100 is needed for factor analysis and as a general rule of thumb the observations should be 5 times the number of variables. The number of variables in this study before factor analysis is 40 questions which suggests that the sample size should be larger than 200. There are 8 independent variables in this study; a sample size of 50 + 8*8 = 114 is adequate for regression analysis. A sample size of 300 meets all the above arguments of having a proper sample size for factor analysis and regression analysis.

To ensure required sample size and to allow for the possibility of spoiled questionnaires, trained research assistants targeted 525 retail shoppers. At the time of study there were 51 malls in NCR (Appendix 3: List of Shop-In-Shop in NCR). On the basis of Simple Random Sampling 15 SIS (shop-in-shop) were selected and out of each shop-in-shop respondents were approached on the basis of Judgemental Sampling. Thus the total number
of respondents came out to 525. Out of the 525 respondents, 445 questionnaires were received at a response rate of 84.76 per cent. On further filtering, 424 responses were found to be completely filled, which is more than the 300 needed for factor analysis as stated by Tabachnick and Fidell (2007) and more than the minimum required for regression analysis. This response rate is higher than the response rate of the acceptable limits to ensure the validity of the data (Miller, 1991).

3.4 SOURCES OF DATA

Data sources are classified as being either primary sources or secondary sources. A source is primary if the data collector is the one using the data for analysis. A source is secondary if one organization or individual has compiled the data to be used by another organization or individual. Both primary and secondary data has been collected in this research. Secondary data has been collected from published thesis works, unpublished thesis works, websites and research articles from journals. On the other side the primary data were collected by means of a structured comprehensive questionnaire that was developed by the researcher based on the literature review on the relevant topics.

The questionnaires were distributed to shoppers of garment retail during July 2009-January 2010. The research assistants explained the voluntary nature of the survey to the shoppers, assured them of the anonymity of their responses, and told them to feel free to opt out at any time. They provided each respondent with a copy of the questionnaire, explained how the questionnaire was to be filled out and collected the completed questionnaires. The questionnaire was administered prior, during and after the respondents shopping at the shopping mall. Like, shoppers were given questionnaire while they waited in a queue to pay for their goods. Some of them filled the questionnaire while they were having refreshments after they had finished their shopping. This allowed for sufficient time to fill up the questionnaire without interfering with their shopping. Data collection is more meaningful when the responses are taken from customers in the store after the shopping is completed (Boshoff & Terblanche, 1997; Dabholkar, Thorpe & Rentz, 1996). Asking shoppers to complete a questionnaire in the shop provides them with a chance to pay attention to the dimensions while answering the questionnaire; this also eliminates problems with customers trying to recall the shopping experience (Burns & Bush, 2010). In addition, attempts were made to collect data at different days and at different times of the day, i.e. morning, afternoon and evening.
3.5 SCALE AND MEASUREMENT

Questionnaire is a collection of written queries, which is arranged putting all the essential variables for the research and can be completed by the respondents in presence, in absence, directly or indirectly. The questions in a questionnaire are the key to the survey research. Therefore, they must be developed with caution and be vital to the survey. Also, the questionnaire has to keep short or otherwise it would frighten the respondents. Hague et al. (2004) give a number of guidelines regarding a good questionnaire:

1. Ensure questions are without bias
2. Make the questions as simple as possible
3. Make the questions very specific
4. Avoid jargon or shorthand
5. Steer clear of sophisticated or uncommon words
6. Avoid questions with a negative with them
7. Use response band
8. Ensure that the fixed responses do not overlap
9. Allow for “others” in fixed response questions

It is bad to use open-ended questions in self-completion surveys because answers would be inadequate and be very typical (Hague et al., 2004). Usually, close-ended questions are using numbers, yes/no, or multiple choices (Brace, 2004). One main advantage of using close-ended questions in a questionnaire is that they are pre-coded. This kind of questions suits self-completion questionnaires because they save the respondent’s time writing in the answers (Hague et al., 2004). Also, as there is a set of answers known beforehand, the researcher can save a lot of time in data entry and analysis at the later stage (Brace, 2004). Therefore, all the questions in the questionnaire of this study are close-ended questions, in which the respondents are asked to choose between a number of alternative answers.

In this study, the structured questionnaire was focused on measuring service quality, demographic characteristics, and behavioral intentions. The questionnaire used in the present study consisted of three sections A, B and C. Section A dealt with background information of the participants. Section B and C consisted of 40 items split between two instruments measuring service quality and customer loyalty respectively. In section B and C respondents
are required to evaluate the service quality of SIS and its impact in the formation of customer loyalty intentions.

The researcher used a 5 point scale for the study, instead of a 7 point Likert scale because 5 point scales reduce the level of frustration among respondents, and increases the rate and quality of the responses (Prayag, 2007; Buttle, 1996). Thus, all statements employed a five-point scale because it would give a better normal spread of observations. To measure customer loyalty, the instrument must consider behavioural, attitudinal and cognitive aspects of behavioural intentions. That’s why Zeithaml et al. (1996) behavioural intention battery was used. Each of the 13 items was accompanied by a five-point scale ranging from 1 (= not at all likely) to 5 (= extremely likely). The wording of the BIB items was adapted to retail service setting. Similar construct to measure behavioral intentions was also found in some previous literature (Lei and Mac, 2005; Bloemer et al., 1996). The diagrammatic rating scale used in the questionnaire is as follows:

<table>
<thead>
<tr>
<th>Extremely unlikely</th>
<th>Unlikely</th>
<th>Neither likely nor unlikely</th>
<th>Likely</th>
<th>Extremely likely</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

The validated Retail Service Quality Scale developed by Dabholkar et al. (1996) was employed to measure perceived service quality. The items of RSQS was evaluated on a five-point scale ranging from 1 (= strongly disagree) to 5 (= strongly agree) (Dabholkar, Thorpe, and Rentz, 1996). The diagrammatic rating scale used in the questionnaire is as follows:

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neither disagree nor agree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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Small adaptations to the RSQS instrument were made. Review of literature (empirical research Kaul, 2007) along with opinion of store managers (SIS) and independent experts (consultants, Indian Retail) highlighted that two items of RSQS were not relevant in Indian retail appertained to “telephonic interaction with customers” and “store’s own credit cards”. The statement “store’s own credit cards” seems premature in the Indian retail environment where credit cards have only recently started getting widespread acceptance and very few retail stores have their own credit cards. That is why out of the 28 statements of RSQS two
were not included in the questionnaire because of its inapplicability in the Indian organised retail (Kaul, 2007).

Finally, the questionnaire included 26 statements on the retail service quality and one statement on the overall perception of service quality. The overall perception of service quality was assessed using a single item, “Overall the quality of the service in the retail outlet is excellent” measured on a five-point scale, anchored at 1 (=strongly disagree) to 5 (=strongly agree) (Appendix 2: Questionnaire).