CHAPTER 1

INTRODUCTION AND DESIGN OF THE STUDY

1.1 INTRODUCTION

The retailing environment has visualized a tremendous growth in the size and the market dominance of larger players, with greater store size, increased retail concentration and the utilization of a range of formats. This growth has intensified the level of competition in retail business, stimulating the retailers to reposition and diversify their retail formats and innovate in their distribution systems. The maturity of core markets, the erosion of traditional shopping patterns through urbanization and the social and the demographic changes of developed markets have stimulated several major players to focus more on establishing themselves in the developing markets.

The global retail industry has been growing at a rapid pace during the last few decades. Retail sales through modern formats is rising faster than the total retail sales. The share of modern retail has risen from about 45 per cent in 1996 to over 52 per cent in 2006. However, the spread of organized retailing in different countries varies depending upon the socio-economic factors related to the country. In the developed economies, organized retailing is in the range of 75-80 per cent of total retail, whereas in developing economies, the unorganized sector dominates the retail business. The share of organized retailing varies widely from just 1.00 per cent in Pakistan and 4.00 per cent in India to 36.00 per cent in Brazil and 55.00 per cent in Malaysia. Modern retail formats such as hypermarkets, superstores, supermarkets,
discount and convenience stores are widely present in the developed countries, whereas such forms of retail outlets have just begun to spread in developing countries in recent years, where the retailing business continues to be dominated by family-run neighbourhood shops and open markets.

The modern retail in developing countries cropped up in three successive waves. The first wave took place in the early to mid-1990’s in South America (e.g., Argentina, Brazil, and Chile), East Asia outside China (South Korea, Malaysia, Philippines, Thailand, and Taiwan), North-Central Europe (e.g., Poland, Hungary, and Czech Republic) and South Africa. The second wave emerged during the mid to late 1990’s in Mexico, Central America (e.g., Ecuador, Colombia, and Guatemala) and Southeast Asian countries (e.g., Indonesia), Southern-Central Europe (e.g., Bulgaria). The third wave eventuated in the late 1990’s and early 2000’s in certain parts of Africa (e.g., Kenya), a few countries in Central and South America (e.g., Nicaragua, Peru, and Bolivia), Southeast Asia (e.g., Vietnam), China, India, and Russia. Thus, the third wave countries which include China, India and Russia are the late comers in the diffusion of modern retailing. Table 1.1 indicates the percentage of organised retail trade in various countries.

Table 1.1 Percentage of organized trade in various countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Organised trade %</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>4</td>
</tr>
<tr>
<td>China</td>
<td>17</td>
</tr>
<tr>
<td>Poland</td>
<td>20</td>
</tr>
<tr>
<td>Indonesia</td>
<td>30</td>
</tr>
<tr>
<td>Russia</td>
<td>33</td>
</tr>
<tr>
<td>Brazil</td>
<td>35</td>
</tr>
<tr>
<td>Thailand</td>
<td>40</td>
</tr>
<tr>
<td>Malaysia</td>
<td>55</td>
</tr>
<tr>
<td>USA</td>
<td>85</td>
</tr>
</tbody>
</table>
With the transforming demographic features and improvement in the quality of urban life in India, the Indian retail sector is witnessing a tremendous growth in terms of modernisation. The total retail sales in India is expected to grow from US$ 353.0 billion in 2010 to US$ 543.2 billion by 2014 (The BMI India Retail Report 2010). Strong underlying economic growth, population expansion, increasing wealth of individuals and rapid construction of organized retail infrastructure are the key factors behind the forecasted growth. As well as, with the expanding middle and upper class consumer base there will also be opportunities for organised retailing in India's emerging cities.

As per AT Kearney's annual Global Retail Development Index (GRDI) 2010, India is ranked third in the list of the most attractive markets for retail investment. India has one of the largest numbers of retail outlets in the world. Of the 12 million small and medium retail outlets existing in the country, nearly 5 million sell food and grocery items. The market is witnessing a migration from traditional retailing to modern/organised retailing formats, with an explosive proliferation of malls and branded outlets. Modern retailing outlets in India are increasingly becoming global in their standards and are witnessing an intense competition. With a share of over 95 per cent of total retail revenues, traditional retailing continues to be the backbone of the Indian retail industry. Traditional retail is highly pronounced in small towns and cities, with a primary presence of neighbourhood 'kirana' stores, push-cart vendors, 'melas' and 'mandis'.

The food and beverages segment accounts for the largest share with more than 70 per cent of the total retail pie. Traditional retail dominates food, grocery and allied products sector, with the grocery and the staples largely sourced from kirana' stores and push cart vendors. Food and grocery constitutes the bulk of Indian retailing and its share is about 60%. Organised
retailing accounts for about less than 2 per cent of the food retailing industry in India. However, the share of organised retailing in food and grocery segment could grow to 15-20%, if the current trends in expansion of organised retail continue has been studied by Reardon et al (2008). Nilgiris, established in 1905 as a dairy farm near Ootacamund in South India could perhaps be the first organised supermarket in India. Though Spencers has been a part of Indian retail landscape since 1863, it began selling groceries only in 1920. Safal, established in 1988 by the National Dairy Development Board (NDDB), was the first organised retailing venture for fruits and vegetables in North India particularly in Delhi. Establishment and expansion of the Food World outlets by the RPG Group starting with the first outlet in Chennai in 1996 led to enhanced corporate interest in food retailing. RPG (Spencers), Reliance (Fresh), ITC (Choupal Fresh), Aditya Birla (More), Heritage (fresh®), Pantaloon Retail (Food Bazaar), Bharti (Easy day), Express Retail (Big Apple) are some of the major corporate houses currently active in food retailing in India. Much of the expansion in food and grocery retailing in India is currently concentrated in the southern states, in and around Chennai, Hyderabad and Bangalore.

The ICRIER (2008) study found that the unorganized retailers situated near the organised retailers are experiencing a decline in their volume of business and profit in the initial years after the entry of the large organised retailers. The impacts are expected to be larger in the long run, when the organised retailing of food and grocery reach at least 25-30% of the total sales is studied by Reardon et al (2008). However, the consumers gain from the low prices offered at the shops of the organised retail stores compared to the other formats (ICRIER 2008).

Organised retail in India is largely restricted to urban regions with consumer exposure to modern retailing formats such as malls, standalone
stores, etc., for specific product categories. While India’s top 20 cities account for just 10 per cent of the country’s population, they earn more than 30 per cent of the country’s income and spend 21 per cent of the country’s total income. From the point of view of India’s marketing firms, the top 20 cities and their growth are clearly of paramount importance. The emerging and potential cities are projected to contribute about US$ 27 billion to retail revenues in 2009-2010. 52 leading towns emerged as retail hubs by 2011 with tier-III towns gaining market potential to host five or more hypermarkets. The combined retail potential of these cities is expected to soar to US$ 33 billion by 2014.

1.1.1 Organized retail store

1.1.1.1 In-Store attributes

The various in-store attributes of the organised retail stores are discussed in this section. Promotional strategies are very crucial for the retailers as they try to make their promotions more effective and gain a competitive position in the market place. Sales promotion comprises a wide variety of short-term tactical promotional tools designed to generate an immediate market response. In the last few decades, the budget of many consumer goods manufacturers has undergone a dramatic shift, with lot of money being spent on sales promotions than on advertising.

The significance of product display area in self-service stores stems from the importance of physical product exposure as a sales stimulus. Most retail stores employ product displays to attract the attention of potential buyers and stimulate their demands for goods. The more space allocated to an item, the more likely it is to be purchased. This is particularly true in case of items that are likely to be purchased on impulse. Some of the buyers are brand
indifferent and would substitute brand A for B. The brand switcher perceives no differences between brands and disregards those disparities which do exist.

Every one is a consumer and tends to consume things everyday based on his/her needs, likes and buying capacity. There are vast varieties of goods in the market place but the consumers go for the ones which are of their use and match their purchasing capacity of buying the same.

A consumer’s buying is driven by so many things such as expectations, perceptions, attitudes, beliefs, motivation, self-concept, family and cultural background and social class. When the consumer goes for a purchase, at first consideration and decision are made whether certain products are to be bought or not. Then the type of source is considered and selected. Thus, it is very crucial to understand the needs of the consumers and formulate internal and external marketing plans accordingly.

Mehrabian & Russell (1974) in their theory employs the measure of three variables- pleasure, arousal and dominance- to describe and measure the individual affective responses to an environment. Pleasure is indicated by respondents’ verbal assessments of the environment as happy, pleased, satisfied, contented, hopeful and relaxed. Arousal is verbally accessed as the extent to which respondents report feeling such as stimulated, excited, frenzied, jittery, and wide-awake and aroused. Dominance is indicated by respondents’ feeling of being controlled, influential, in-control, important, dominant and autonomous (Foxall & Greenley 2007).

1.2 STATEMENT OF THE PROBLEM

The retail industry in India has come forth as one of the most dynamic and fast paced industries with several players entering the market. The entry of global giants like Wal-Mart, Carrefour, Tesco, Target, etc., in
retail sector poses a big threat for both the organized and the unorganized retailers in India. It is more complex, to frame unique strategies to compete these global players. Organised retailing in Tamil Nadu is a high street story. Although Tamil Nadu is one of the leading states in India, it is yet to gain attention from a large number of retailers, the way other states in India have been receiving. The success of any format of retail industry solely depends on how it performs in the market place at a given point of time. The performance in turn depends on how efficiently the industries persuade the consumers in to its basket which requires the retail stores to understand the behaviour of the consumers. But, understanding the consumer behaviour is complex, as it is related to the psychology of consumers and also depends on various social factors which have a direct impact on consumer behaviour. This in turn, led the retailers to redraft their existing marketing strategies and introduce appropriate changes to establish and sustain themselves in the industry. Thus, the consumers’ buying behaviour becomes an integral part of the marketing strategies of the organized retail stores. In this context, it is imperative to study the consumers’ buying behaviour towards organized retail stores and the present research work has tremendous relevance to the retailers in formulating their marketing strategies. This will enable the retailers to know the expectations of the consumers about the format of the retail stores they are banking upon.

1.3 OBJECTIVES OF THE STUDY

The following are the objectives framed for the study.

1. To study the demographic characteristics of the consumers of organized retail stores in Tamil Nadu.

2. To determine the buying behaviour of the consumers at organized retail stores.
3. To explore the level of satisfaction of the consumers.

4. To examine the marketing strategies practiced by the organized retailers in the study area.

5. To identify the problems faced by the consumers as well as the retailers.

6. To offer suggestions to improve the service performance of the organized retail stores.

1.4 PROFILE OF THE STUDY AREA

1.4.1 Tamil Nadu

Tamil Nadu lies in the southernmost part of the Indian Peninsula and is bordered by the union territory of Pondicherry, and the states of Kerala, Karnataka, and Andhra Pradesh. It is one of the 28 states of India. Its capital Chennai is the largest city. It is the eleventh largest state in India by area and the seventh most populous state and also the second largest state economy in India.

The state is ranked 6th among the states in India according to the Human Development Index as of 2011. The state has the highest number (10.56 per cent) of business enterprises and stands second in total employment (9.97 per cent) in India, compared to the population share of about 6 per cent. According to the 2011 Census, Tamil Nadu is the most urbanised state in India (49%), accounting for 9.6% of the urban population while comprising only 6% of India's total population. Service sector contributes to 45% of the economic activity in the state, followed by manufacturing at 34% and agriculture at 21%. Government is the major investor in the state with 51% of total investments, followed by private Indian investors at 29.9% and foreign private investors at 14.9%. Tamil Nadu has a
network of about 113 industrial parks and estates offering developed plots with supporting infrastructure. Figure 1.1 gives a clear picture of the location of various cities chosen for the study.

1.4.2 Chennai

Chennai, the capital city of Tamil Nadu is a major commercial, cultural, economic and educational center in South India. The city has 4.68 million residents making it the sixth most populous city in India, the urban agglomeration, which comprises the city and its suburbs, was home to approximately 8.9 million making it the fourth most populous metropolitan area in the country and 31st largest urban area in the world. Chennai's economy has a broad industrial base in the automobile, computer, technology, hardware manufacturing and healthcare sectors. The city is India's second largest exporter of Information Technology (IT) and Business Process Outsourcing (BPO) services. A major part of India's automobile industry is based in and around the city, thus earning it the nickname "Detroit of India".

Chennai remains the chief retail industry and shopping centre in Tamil Nadu, with some of its suburbs serving as exclusive shopping districts. Since the formation of the city in the seventeenth century, George Town remains one of the chief commercial neighbourhood of the city. However, with the centuries passing, the central business district of the city started shifting towards the south of Fort St. George and moving to its present location at Gemini Circle. The city's retail industry is concentrated chiefly in T. Nagar, which is by far the largest shopping district of India, generating more than twice the revenue of Connaught Place in New Delhi or Linking Road in Mumbai, even by conservative estimates.
Figure 1.1 Location of the study area
1.4.3  Coimbatore

Coimbatore is the second largest metropolitan city and urban agglomeration after Chennai in Tamil Nadu. It is one of the fastest growing tier-II cities in India and a major textile, industrial, commercial, educational, information technology, healthcare and manufacturing hub of Tamil Nadu. The city has been ranked 4th among the Indian cities in investment climate by Confederation of Indian Industry (CII) and ranked 17th among the top global outsourcing cities.

Coimbatore has a large and a diversified manufacturing sector facilitated with more than 25,000 small, medium and large industries. Coimbatore is called the "Manchester of South India" due to its extensive textile industry, fed by the surrounding cotton fields. The district also houses the country’s largest amount of hosiery and poultry industries. The city has two special economic zones (SEZ), the Coimbatore Hi-Tech Infrastructure (CHIL) SEZ at Saravanampatti. The TIDEL Park near Peelamedu and around five more SEZs are on the pipeline in the city. The city is the second largest software producer in Tamil Nadu, next only to Chennai. IT and BPO industry in the city has grown greatly with the launch of TIDEL park.

1.4.4  Madurai

Madurai is the third largest city and the second largest municipal corporation in Tamil Nadu. Located on the banks of river Vaigai, it has been a major settlement for two millennia and is one of the oldest continuously inhabited cities in the world. Madurai is an important industrial and educational hub in South Tamil Nadu. The city is home to various automobile, rubber, chemical and granite manufacturing industries. It has developed as a second-tier city for information technology (IT), and some software companies have established themselves in Madurai. The city also
hosts important government educational institutes like the Madurai Medical College, Homeopathic Medical College, Madurai Law College, Agricultural College and Research Institute.

1.4.5 Tiruchirapalli

Tiruchirapalli is the fourth largest municipal corporation and the fourth largest urban agglomeration in the state. Tiruchirapalli is an important industrial and educational hub of central Tamil Nadu. The factories of Ordnance Factories Board such as Ordnance Factory Tiruchirapalli (OFT) and Heavy Alloy Penetrator Project (HAPP), Bharat Heavy Electricals Limited (BHEL) and Golden Rock Railway Workshops are located in Tiruchirapalli. Trichy is a well suitable place for heavy industries, pressure vessel/boiler fabrication industries, engineering industries and wood industries due to its good road networks, work force availability and nearest seaport availability (Karaikal, 130 km) etc. Also, it is one of the fast growing cities in terms of the IT sector as it has a full fledged IT park from ELCOT. The city has a number of retail and wholesale markets, the most famous among them being the Gandhi market which is an important source of vegetables for the whole region.

1.4.6 Salem

Salem is the fifth largest city in terms of population after Chennai, Coimbatore, Madurai and Trichirapalli respectively. It is the fifth municipal corporation and urban agglomeration commissioned in Tamil Nadu. Salem is one of the most major producers of traditional silver anklets. It hosts large textile, steel, automotive, poultry and sago industries. Salem also has one of the largest magnesite deposits in India. Companies like Dalmia and TANMAG have their mines here. It has also got rich bauxite & mineral reserves. It also has rich industrial base with the Salem steel plant, SISCOL,
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MALCO, Chemplast and also the Thermal & Hydel power plant at Mettur contribute towards power supply to the state.

Silk and cotton fabrics from Salem are sold throughout Tamil Nadu and are a big buy. The Indian Institute of Handloom Technology, the second of its kind in India, is found here. The Leigh Bazaar market is known for selling agricultural products and is usually abounding with visitors and shoppers.

1.4.7 Tirunelveli

Tirunelveli also known as Nellai is located on the west bank of the Thamirabarani river. Industries in Tirunelveli include administrative services, agricultural trading, tourism, banking, agricultural machinery and educational services. The city is an educational hub of southern Tamil Nadu, with institutions such as Tirunelveli Medical College, the Veterinary College and Research Institution, Tirunelveli Law College and the Government College of Engineering.

Service sectors such as tourism have developed due to the growth in religious tourism. Tirunelveli has cement factories, tobacco companies, workshops for steel-based products and mills for cotton textiles, spinning and weaving. There are also small-scale industries such as tanneries and brick kilns. Tirunelveli is a major area for wind-power generation. Most wind-power-generation units in Tamil Nadu are located in Tirunelveli and Kanyakumari Districts.

1.5 HYPOTHESES OF THE STUDY

1. There is no significant relationship between the selected independent variables of the consumers viz., location, age, gender, marital status, educational qualification, occupational status, annual family income, family size, type of family,
period of purchase, type of stores visited, frequency of visiting the store, purchase range, regular mode of payment and their level of satisfaction towards the organized retail stores.

2. There is no significant difference between retailers’ age groups, experience, educational qualification, income, type of business, period of running the store, type of store and their response towards performance in utilizing the marketing strategies.

3. There is no significant difference between the different marketing strategies in terms of retailers’ responses.

1.6 RESEARCH METHODOLOGY

The validity of any research depends on the systematic method of collecting data and analyzing the same in a logical and sequential order. In the present study, an extensive use of both primary and secondary data has been made.

1.6.1 Sample design and size

In the selection of sample consumers, a multi-stage stratified convenience sampling followed by judgement sampling method is used. Sample size refers to the number of data to be gathered for the study from the given population. Since the study covers a universe with infinite population (ie, number of consumers visiting the retail store is unknown) the sample size is calculated through the pilot survey. A pilot study was conducted among 50 consumers to get the value of standard deviation. Then with 95% of confidence level the sample size is calculated. To calculate the sample size ‘n’ for a population, the following formula is used.
\[ n = \frac{z^2 \times \sigma^2}{e^2} \]

where \( \sigma \) - standard deviation, \( z \) - confidence interval and ‘e’ - error

By carrying out a pilot study among 50 consumers the standard deviation \( \sigma \) value was calculated as \( \sigma = 0.62 \), with 95 per cent of confidence level the value of \( z \) is 1.960 and with standard error of 0.04 the sample size is calculated. The calculated sample size was 1014 which was collected from top 6 corporations in Tamil Nadu viz., Chennai, Coimbatore, Madurai, Tiruchirappalli, Salem and Tirunelveli. Fourteen samples were rejected from the analysis due to biased and unfilled response from the selected sample respondents. Valid 1000 samples are considered for the data analysis. The distribution of the sample size is given in Table 1.2.

**Table 1.2 Distribution of sample size**

<table>
<thead>
<tr>
<th>S.No.</th>
<th>City Name</th>
<th>Sample Size</th>
<th>Select Retailer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Consumer (Before finalized)</td>
<td>Consumer (After finalized)</td>
</tr>
<tr>
<td>1</td>
<td>Chennai</td>
<td>254</td>
<td>250</td>
</tr>
<tr>
<td>2</td>
<td>Coimbatore</td>
<td>202</td>
<td>200</td>
</tr>
<tr>
<td>3</td>
<td>Madurai</td>
<td>179</td>
<td>175</td>
</tr>
<tr>
<td>4</td>
<td>Tiruchirappalli</td>
<td>152</td>
<td>150</td>
</tr>
<tr>
<td>5</td>
<td>Salem</td>
<td>125</td>
<td>125</td>
</tr>
<tr>
<td>6</td>
<td>Tirunelveli</td>
<td>102</td>
<td>100</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1014</strong></td>
<td><strong>1000</strong></td>
<td><strong>50</strong></td>
</tr>
</tbody>
</table>

Stratified sampling method is used to select the location (cities) of the retailers in Tamil Nadu. In addition to that, convenience sampling method is adopted to select 50 retailers like Reliance Retail, Big Bazaar, Spencers, Birla More, Shri Kannan Departmental stores, etc., from the above select cities with the distribution shown in Table 1.2.
1.6.2 Reliability

The reliability of the enquiry schedule and the individual items in it were tested with the help of Cronbach’s alpha. Examination of Cronbach’s alpha provides information about the reliability of any given set of measures. The value of alpha must be larger than 0.70 to imply reliability. The Cronbach’s alpha value in this research is 0.923 and hence the study is reliable for analysis.

1.6.3 Sampling design and technique

The Universe in the present study comprises of the consumers who purchase at the organised retail stores in Tamil Nadu. The sampling units were selected by covering the leading six cities viz., Chennai, Madurai, Trichy, Salem, Coimbatore and Tirunelveli. The size of the sample was 1000 respondents. These samples were carefully selected by the researcher from those who purchase from organized retail stores in all the six cities of the study area. Both primary and secondary data were used in the study for analysis. For collecting primary data, the field survey technique was employed. A well framed questionnaire was also used to collect the primary data. The entire Tamil Nadu has been selected based on the multi-stage stratified convenience sampling followed by the judgement sampling technique for collecting the data. First hand information pertaining to the consumers’ buying behaviour and their preference for shopping in different organized retail stores were collected from respondents.

1.6.4 Frame work of analysis

By virtue of the mass of data obtained from research survey, as well as from data of the secondary sources collected and presented in the report, a descriptive and an analytical research is considered most appropriate for the
study. The researcher used closed-ended and open-ended questions in the questionnaire to collect the primary data.

1.6.5 Construction of questionnaire

The key aspect of the present research was identified through the preliminary interviews with a few selected retailers and consumers. The questionnaire so drafted was circulated among a few research experts, organized retail stores in-charges / owners and research scholars for a critical review with regard to wording, format, sequence and the like. The questionnaire was then re-drafted in light of their comments.

1.6.6 Pre-test

The questionnaire meant for the respondents was pre-tested with fifty consumers and five retailers. After pre-testing, necessary modifications were made in the questionnaire to fit in on the track of the present study.

1.6.7 Primary data

In order to fulfill the objectives set, the primary data was collected in the form of responses from consumers of organized retail stores in Tamil Nadu. The consumers are the respondents who provide information regarding their understanding, experiences, opinion, and perception towards the marketing practices adopted by organized retail stores. The study was undertaken by using a well framed questionnaire that was duly filled by the respondents. The respondents were selected with varying background based on the aspects like their age, gender, educational qualification, occupation, monthly income level, marital status, type of family, family size and so forth, in the areas of Tamil Nadu. A noteworthy feature was that the respondents filled the questionnaire with much zeal. This was due to the high level of
literacy among the respondents and the researcher’s rapport established with them.

1.6.8 Secondary data

Be it any research, a researcher must be aware of the value of secondary data. The secondary data provided the researcher with information regarding the activities, the scope and the opinions of other researchers and experts in the initial stages. The data further guided the researcher in defining the variables of the study and also identifying the classes of the stakeholders involved. The secondary data provides useful and necessary information supplementing the qualitative aspects of research findings.

For this purpose, the secondary data was collected from all associated sources that include books on marketing, retailing and consumer behaviour, research journals, magazines and periodicals, internet web sources and libraries of reputed universities, institutes in and around Tamil Nadu.

1.6.9 Discussions and informal interviews

In order to know the buying behaviour of the consumers, several rounds of discussion were made with experts in the field of retail marketing, retail store in-charges / owners, consumers utilizing retail stores and the research supervisor.

1.6.10 Statistical tools used for analysis

The difference in the extent of utilizing the retail stores among the different types of consumers based on their age, gender, educational qualification, occupation, monthly income level, marital status, type of family, family size, awareness, period of visiting the retail store, frequency of visit, purchase range and mode of payment is studied by means of
Percentages, Averages, Ranges, Standard Deviation, Two-way tables, Chi-Square test, ANOVA, Correlation analysis and Multiple Regression analysis. In addition, Henry Garrett Ranking Technique is employed for finding the reason for preference and problems of the study. Most importantly Factor analysis and Structural Equation Model are also used in the study.

1.6.10.1 Chi-Square Test

The degree of influence of the following independent variables pertaining to the respondents on their satisfaction towards the organized retail stores were also studied.

- Respondents’ Location
- Respondents’ Age
- Respondents’ Gender
- Respondents’ Marital Status
- Respondents’ Educational Status
- Respondents’ Occupational Status
- Respondents’ Annual Income
- Respondents’ Family Size
- Respondents’ Type of Family
- Respondents’ Period of Purchase
- Respondents’ Type of Store
- Respondents’ Frequency of Visit
- Respondents’ Amount Spent for Purchase
- Respondents’ Mode of Purchase

In order to identify the factors influencing the level of satisfaction in utilizing the services offered by the organized retail stores by the selected
respondents from different places of Tamil Nadu, a Chi-square ($\chi^2$) test was used and the formula is given below:

$$\chi^2 = \sum \frac{(O - E)^2}{E}$$

With Degree of Freedom (D.F.) = (c-1) (r-1)

where,

- $O$ = Observed frequency,
- $E$ = Expected frequency,
- $c$ = Number of Columns,
- $r$ = Number of Rows.

### 1.6.10.2 Analysis of Variance (ANOVA)

Analysis of Variance (ANOVA) is a statistical method for partitioning the total variation of a set of data into components associated with recognized sources of variation. It helps to identify the best marketing strategy among the various marketing strategies offered by the organized retail stores in different locations, age, gender, etc.

Since, it is a two way ANOVA (Completely Randomized Block Design), the following model has been used.

$$Y_{ij} = \mu + A_i + B_j + e_{ij}$$

Where,

- $Y_{ij}$ is the response (frequency) of the $i^{th}$ row under the $j^{th}$ column
- $\mu$ is the overall mean
$a_i$ is the effect of the $i^{th}$ row on the response

$B_j$ is the effect of the $j^{th}$ column on the response

$e_{ij}$ is the error w.r.t. to the $i^{th}$ row under the $j^{th}$ column.

### 1.6.10.3 Correlation Analysis

Correlation analysis helps to determine the strength of the linear relationship between the two variables $X$ and $Y$, in other words, to show how strongly these two variables are correlated. Karl Pearson, in 1896, developed an index or coefficient of this association in cases where the relationship is a linear one, i.e. where the trend of the relationship can be described by a straight line.

The Pearson’s coefficient of correlation is designated by $r$. The coefficient of correlation $r$ can be designed as a measure of strength of the linear relationship between the two variables $X$ and $Y$.

This coefficient has two characteristics:

- **The value of ‘r’ ranges between (-1) and (+1).**

  If there is no relationship between the two variables, then its value must be zero. On the other hand, if the relationship is perfect which means that all the points on the scatter diagram fall on the straight line, then the value of $r$ is +1 or -1, depending on the direction of the line. Other values of $r$ show an intermediate degree of relationship between the two variables.
The sign of the coefficient can be positive or negative.

The sign of coefficient is positive when the slope of the line is positive and it is negative when the slope of the line is negative.

**The Coefficient of Correlation (r)**

\[
r = \frac{n(\sum XY) - (\sum X)(\sum Y)}{\sqrt{n \sum X^2 - (\sum X)^2} \sqrt{n \sum Y^2 - (\sum Y)^2}}
\]

### 1.6.10.4 Multiple Regression Analysis

The regression is a statistical relationship between two or more variables. When there are two or more independent variables, the analysis that describes such relationship is the multiple regression. This analysis is adopted when there is one dependent variable that is presumed to be in relation with the function of two or more independent variables. In multiple regression, a linear composite of explanatory variables is formed, in such a way that it has maximum correlation with an active criterion variable. The main objective of using this technique is to predict the variability of the dependent variable, based on its co-variance with all the independent variables. It is useful to predict the level of dependent phenomenon through Multiple Regression Analysis models, if the levels of independent variables were given. The linear multiple regression problem is to estimate coefficients of \( \beta_1, \beta_2, \ldots, \beta_j \) and \( \beta_0 \) such that the expression,

\[
Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \ldots + \beta_j X_K
\]

provides a good estimate of an individual Y score based on the X scores,
Where,

\[ \begin{align*}
Y &= \text{Consumers’ Satisfaction.} \\
X_1 &= \text{Respondents’ Age} \\
X_2 &= \text{Respondents’ Gender} \\
X_3 &= \text{Respondents’ Marital Status} \\
X_4 &= \text{Respondents’ Educational Qualification} \\
X_5 &= \text{Respondents’ Occupational Status} \\
X_6 &= \text{Respondents’ Annual Income} \\
X_7 &= \text{Respondents’ Family Size} \\
X_8 &= \text{Respondents’ Type of Family} \\
X_9 &= \text{Respondents’ Period of Purchase} \\
X_{10} &= \text{Respondents’ Type of Store} \\
X_{11} &= \text{Respondents’ Frequency of Visit} \\
X_{12} &= \text{Respondents’ Amount Spent for Purchase} \\
X_{13} &= \text{Respondents’ Mode of Purchase}
\end{align*} \]

and \( \beta_0 + \beta_1 + \beta_2 + \ldots + \beta_j \) are the parameters to be estimated.

### 1.6.10.5 Henry Garrett Ranking Technique

This technique is used to rank the opinion of the retailers and the consumers in various dimensions in the study area. In this method, the respondents were asked to rank the given factors according to the magnitude of the issue. The order of merit given by the respondents was converted into ranks by using the following formula.

\[
\text{Percentage Position} = \frac{100(R_{ij} - 0.5)}{N_j}
\]
where,

\[ R_{ij} \quad - \quad \text{Ranking Position} \]
\[ N_j \quad - \quad \text{Total No. of Ranks} \]

The percentage position of each rank thus obtained is converted into scores by referring to the table given by Henry Garrett. Then for each factor the scores of individual respondents were added and divided by the total number of respondents for whom the scores were added. These mean scores for all the factors were arranged in order of ranks and from these inferences were drawn.

1.6.10.6  **Factor Analysis**

Factor Analysis is used to study a complex product or service, in order to identify the major characteristics or factors that are considered important by the respondents. The purpose of factor analysis is to determine the responses to the several numbers of statements, which are significantly correlated. Factor analysis is applied to assess the significance of the factors that are responsible for the factors influencing the consumers towards customer services offered by the organized retail stores.

1.6.10.7  **Structural Equation Modelling (SEM)**

Structural Equation Modelling is used to examine a series of dependence relationships simultaneously. It is particularly useful when one dependent variable becomes an independent variable in subsequent dependence relationship.
1.7 SCOPE OF THE STUDY

The purpose of this study is to analyse the consumers’ buying behaviour which includes a thorough analysis of buying intention, buying habits, buying attitudes and post purchase behaviour of consumers in organized retail stores. Among the various aspects that build the rapport with the buyers and keep them in their fold, the buying behaviour is much more important than the technical or product quality. Hence, the outcome of the present study will be of immense help to the organized retailers in bringing out the various aspects concerned with the consumers’ buying behaviour which would definitely facilitate them to work out appropriate marketing strategies and promote their business.

1.8 LIMITATIONS OF THE STUDY

1. As the geographical area of the study is limited to Tamil Nadu alone, the findings of the study may not reflect the entire Indian scenario.

2. The elicited opinion of consumers may not be good all times, because of individual differences due to age, gender, attitude, income, profession, etc.

3. The findings of the study may not be applicable to the universe, as only 50 samples from retailers and 1000 samples from consumers were taken under convenience sampling.

4. Since, the study covers only organized retail stores, the results obtained may or may not be applicable to other formats of retail stores.

5. There is an element of risk on the fitness associated with the suggestions of the study due to the dynamic nature of consumers’ behaviour from time to time.
1.9 CHAPTER SCHEME

The report of the study has been presented under five chapters, as given below.

Chapter 1: Introduction and Design of the Study. The First Chapter provides the design of the study comprising introduction, statement of the problem, profile of the study area, objectives of the study, scope of the study, methodology and chapterization of the present study.

Chapter 2: Review of Literature. The Second Chapter presents the review of related literature available in the field of retailing and consumers’ buying behaviour related to the study.

Chapter 3: Analysis of the Retailers’ Profile, Marketing Strategies adopted by them and Problems Faced in Retail Business in the Study Area. The Third Chapter incorporates the data analysis from the profile of the retailers, marketing strategies adopted by them and the problems faced by them in retail business.

Chapter 4: Analysis of the Consumers’ Profile, Buying Behaviour and the Problems Faced by them in the Study Area. The Fourth chapter inculcates the analysis of the data obtained from the profile of the consumers, their buying behaviour and the problems faced by them.

Chapter 5: Findings, Suggestions and Conclusion. The Final chapter highlights the summary of key findings, suggestions and conclusion.