5

METHODOLOGY OF THE STUDY

The study is mainly concerned with the identification of socio-economic background of the retailers, the characteristics of their enterprises and the managerial attitudes of the retailers doing business in various parts of the country. To achieve these goals, the data of the respondents were collected through structured questionnaire from various market areas of West Bengal. A brief notes on the location and demographic characteristics of the sampled areas have been presented here.

5.1 Location and demographic characteristics of the sampled areas, West Bengal

West Bengal is located on the eastern part of India. It is bounded on the north by the Himalayas and in the south, it is bordered by the Bay of Bengal. It is criss-crossed by many rivers and its physical characteristics are largely shaped by those rivers (Ganga, Teesta, Damodar, Rupnarayan etc.). It has an area of 88752 sq. kms as of 1991 census. The climate of West Bengal is of tropical monsoon type. The rainfall varies considerably from one part of the state to another. Similarly, there is a variation in the temperatures also (see appendix 1...)

5.1.1 Calcutta

Calcutta was born when job charnock, captain of a band of British traders, cast anchor at Sutanuti, a swampy village on 24th Aug. 1690. But the tiny trade settlement he founded, along with the neighboring villages of Kalikata and Gobindapur, grew to become eventually the great city of Calcutta. Now, Calcutta is a district and Capital city of West Bengal, which is about 48 kms from the sea, is 21 ft. above sea level. Calcutta is located on the eastern bank of river Ganga. According to 1991 census the population of Calcutta district is 44,21,236 persons. It ranks 6th according to its population size in the state of West Bengal. It has an area of 185 sq kms. It is well connected to the rest of India and world (see appendix 1...
5.1.2 Bankura Town

Bankura ranks 11th in the state of West Bengal (in terms of size of population). Bankura, the land of red soils is located on the South western part of West Bengal. It has an area of 6882 sq.km. Its physical characteristics are also largely shaped by the rivers like Dwarakeswara, Silabati, Kangsabati, and Gandheswari etc.) The climate is of tropical type. The rainfall varies widely from year to year. The temperature ranges from 6 to + 44/45 degree Celsius. The District town Bankura is bordered by the river, Dwarakeshwara on the one hand and by the river Gandeshwari on the other. It is a municipal town having an area of 19.06 sq.kms and with a population of 1,14,876. It is 180 kms (through Bus route via Arambagh) and 231 kms (through train route via Kharagpur) from Calcutta. It is connected both by the trains and buses with other parts of the state. (see appendix 1...)

5.1.3 Bishnupur Town

It is a place of historical importance and also famous for Baluchari Saree. Bishnupur is another municipal town in the district of Bankura, located 35 kms away from the district town of Bankura. It has an area of 22.01 sq.km. and the total population is 56,128 persons. The climate is same as that of Bankura town. Irregular rainfall, low temperature in Dec - January and very high temperature in May - June is climatic characteristics of this area. Bishnupur is also well linked with the district town Bankura and the Capital city, Calcutta. (see appendix 1).

5.1.4 Jhantipahari

Jhantipahari is a village under chhatna P.S. It is located 20 kms away from the district town, Bankura. It is on the Western side of Bankura. It is also linked by rail and roads with the Bankura town and Calcutta. It has an area of 388 Hectares and the total population 4,284. It is connected with the district town Bankura and Capital city, Calcutta, by rail and road. (see appendix 1).

5.1.5 Saltora

Saltora is a village under saltora P.S. It is located on the North-West side of Bankura and it is about 40 kms away from Bankura. The place is connected with the district town and
neighboring districts by metal roads only. It has an area of 320.55 Hectares and the total population is 2956. (see appendix 1)

5.1.6 Taldangra

Taldangra is a village under Taldangra P.S. It is located on the southern part of Bankura having an area of 90.68 Hectares. The total population of Taldangra is 1311. It is connected with Bankura town by road only. The distance from Bankura town is 28 kms. (see appendix 1)

5.1.7 Ambikanagar

Ambikanagar is a historical village under Ranibandh P.S. of Bankura district located near Mukutmanipur Water Reservoir. It is about 55 kms away from Bankura town. It has an area of 154.20 Hectares having the total population of 2697. It is also connected with the district town by road only. The neighboring districts are Purulia and Midnapur of West Bengal. (see appendix 1)

5.1.8 Onda

Onda is a village under P.S. located on the eastern side of Bankura district. The distance from the district town is 18 kms, connected by both rail and metal road. It has an area of 315.50 Hectares and the total population is 4990. (see appendix 1)

5.2 Statistical techniques used in the study

The study is concerned with the identification of soci-economic background of the retailers doing business in various parts of the country. Their social relationship, motivational and managerial attitudes towards their trade were taken into consideration. To achieve these goals, the data of the respondents were collected through structured questionnaire and the main hypothesis was formulated that the city market retailers, town market retailers and the village market retailers would not differ significantly in their personal, socio-economical motivational and managerial characteristics. Their thinking and feelings on various aspects of trade environment were analysed to ascertain a generalized concept regarding retailing with special reference to store retailing. In order to bring objectivity in the conclusions of the present research work and also to determine whether or not the observed differences among the research samples of different categories of retailers were significant or merely due to
chance, the researcher took the help of several statistical techniques. The following statistical techniques were used in the present study:

1. (a) Measures of central tendency - It is often essential to represent a set of data by means of a single number which, in its way, is descriptive of the entire set. The principal measures of central tendency are the mean, the median and the mode. In this study the means were utilised for the purpose of ascertaining results concerned.

(b) Measures of dispersion - In social research, we often wish to know the extent of homogeneity and heterogeneity among respondents with respect to a given characteristics. The measures of central tendency are not concerned with the variability in a distribution. For this purpose, Standard deviations have been used to indicate the spread-out of the data.

2. The differences in variability among groups is a matter of considerable importance. Whether a difference is to be taken as statistically significant or not depends upon the probability that the given difference could have been arises" by chance". Experimenters and research workers have for convenience chosen several arbitrary standards - called level of significance. In this study, the difference of the sample means for different groups of retailers were tested by using the following formula:

\[
Z_1 = \frac{X_1 - X_2}{\sqrt{\frac{s_1^2}{n_1} + \frac{s_2^2}{n_2}}}
\]

Where \(X_1\) and \(X_2\) are the means of the two samples and \(n_1\) and \(n_2\) are the sample size and \(s_1\) and \(s_2\) are the standard deviations of samples 1 and 2.

3. The chi-square statistic is employed to test the agreement between observed results and those expected in some hypothesis. The application of chi-square can be made when we wish to investigate the relationship between traits and attributes which can be classified into two or more categories. By securing statistical support in favour of the hypothesis and to identify various attributes and thinking of different categories of
retailer-respondents, this test can show the actual path of generalisation in this particular field. In this research work chi-square test statistic was applied to ascertain whether different sets of data are sufficiently or significantly different from one another or not. The association of attributes and the attitudes of the retailers of various categories on various aspects of retail trade were examined with the help of the chi-square statistic. This test is perhaps the most commonly used in studies dealing with social-behavioural data. The simplified formula is

$$x^2 = \sum \frac{(O_i - E_i)^2}{E_i}$$

$O_i$ = Observed frequency in $i$th category

$E_i$ = Expected frequency in $i$th category

$K$ = number of categories.

(For $X^2 = 10.827$ at .001 level, $X^2 = 6.635$ at .01 level $X^2 = 3.841$ at .05 level, $X^2 = 2.706$ at 1 level of significance) For making a comparison of different sets of data, this test statistic have been utilised at different level of significance for bringing objectivity in the present research work.

F distribution (ANOVA) - The F distribution was named after the famous statistician, R.A. Fisher. It is basically the relationship of the variances of two independently selected random samples taken from a normally distributed population. Analysis of variance is a mathematical technique for partitioning the total variation of a set of data in such a manner so as to identify the component sources of variation. As applied to marketing, the technique enables the researcher to test efficiently the hypothesis concerning the equality of more than two population means. In this study, F test was used to measure whether significant differences exist between the variability caused by different places of retailing and that resulting from the natural or chance variability which exist in the observed data. The researcher calculated only the between-group
variability and the total variability and obtained the figures on the within-groups by subtraction of the between group sum of squares from the total sum of squares figures.

5.3 Design of the field study

This investigation sought to lay bare the basic features of the retailers engaged in store retailing of various consumer products such as grocery, cosmetics, drugs, shoes, clothing and bedding, household appliances, electrical and electronic goods, food items and building materials to identify the managerial properties that make the differences among themselves. This study was also geared toward finding out those selective factors of motivational urges that operated in the life histories of the retailers. In order to put scientific weight to the conclusion, the retailers were compared among themselves with the help of a simple five point scale for each attitude variables of retail trade management. Thus, in terms of the design of experiment, the investigation involved the sampling of three groups of retailers - city Market Retailers (CMR), Town Market Retailers (TMR) and village Market Retailers (VMR) and their respective stores.

Table 18

<table>
<thead>
<tr>
<th>Products</th>
<th>CMR</th>
<th>TMR</th>
<th>VMR</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Grocery (variety stores)</td>
<td>12 (13.95)</td>
<td>14 (16.28)</td>
<td>16 (18.60)</td>
<td>42 (16.28)</td>
</tr>
<tr>
<td>2. Drug</td>
<td>6 (6.98)</td>
<td>6 (6.98)</td>
<td>6 (6.98)</td>
<td>18 (6.98)</td>
</tr>
<tr>
<td>3. Shoe</td>
<td>5 (5.8)</td>
<td>4 (4.65)</td>
<td>4 (4.65)</td>
<td>13 (5.03)</td>
</tr>
<tr>
<td>4. Clothing &amp; Bedding</td>
<td>22 (25.58)</td>
<td>22 (25.58)</td>
<td>20 (23.26)</td>
<td>64 (24.80)</td>
</tr>
<tr>
<td>5. Cosmetics</td>
<td>4 (4.65)</td>
<td>4 (4.65)</td>
<td>4 (4.65)</td>
<td>12 (4.65)</td>
</tr>
<tr>
<td>6. Household appliances</td>
<td>8 (9.31)</td>
<td>7 (8.14)</td>
<td>7 (8.14)</td>
<td>22 (8.14)</td>
</tr>
<tr>
<td>7. Electrical/Electronic goods</td>
<td>9 (10.5)</td>
<td>8 (9.3)</td>
<td>4 (4.7)</td>
<td>21 (8.14)</td>
</tr>
<tr>
<td>8. Food items (including</td>
<td>13 (15.1)</td>
<td>14 (16.3)</td>
<td>18 (20.9)</td>
<td>45 (17.45)</td>
</tr>
<tr>
<td>Confectionery &amp; Beverages)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(including decorating items)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>86 (100.0)</td>
<td>86 (100.0)</td>
<td>86 (100.0)</td>
<td>258 (100.0)</td>
</tr>
</tbody>
</table>

Consumer product wise distribution of retail enterprises.
The researcher approached as many as 350 retail traders of various consumer products. But a large number amongst them were not willing to answer the questionnaire. Only seventy-nine percent (79%) responded favourably. In this study, 279 retailers cooperated with the researcher. The researcher deleted 5 respondents answer because the researcher felt that their answers were either inflated or deflated and do not reflect the actual positions of their trades. Out of 274 respondents the number of VMR were 86. In order to keep the number of each group of retailers equal, the researcher further deleted 16 respondents' answer at random and so finally 258 (86x3) respondents' feelings and experiences were analysed and the present study was carried on. Apart from the answers provided by the retailers through questionnaire, the researcher's personal observations were taken into consideration in certain cases where the respondents were not willing and hesitating to answer on some questions (particularly regarding the income, sales and amount of investment).

The researcher also considered the views of 129 regular customers (43 from each group i.e. 50% of the sampled stores’ customers) for assessing the reasons of their adherence to a particular retail stores (store loyalty).

5.3.1 Selection of sample

It is well taken that the best and most acceptable criterion for the selection of a sample is the degree to which it may be regarded as representative of the universe under study. But unfortunately, no such criterion has been available for the study. So far, our knowledge of the extent and variability of the universe of retailers of India is meagre. According to the estimates of Economic census of India 1996 there are about 100 retail enterprise per thousand of working population. Therefore, rigid statistical technique of random sample from the population was hardly applicable here. The researcher based the stratified sampling technique. Firstly, the total population were divided into three categories on the basis of geographical location (say, city market, town market and village market). In city area, three locations of market were taken by segregating the total city market. The total city markets were segregated into three namely, North, South and Central area. This present study covered thirty store retailers of Hatibagan market from North area, thirty two store retailers of Gariahat Market from South area and twenty four store retailer of Dharmatala market from Central area. It is true, that the number of retailers were not same in all the three areas. But the stores which were taken into consideration are situated on the main through-fare of the city. The stores are situated within three to five minutes walking distance from the main
traffic junctions. In the similar way the town market retailers and village market retailers were covered in this investigation. While selecting the customers, the retailer approached only to the regular customers of the respective stores. Similarly data were collected from other market area also.

In case of TMRs, forty eight and thirty eight retailers of Bankura town market and Bishnupur town market respectively were taken into consideration. In case of VMRs, retailers from five village markets (namely, thirty one from Jhantipahari, sixteen from Onda, nineteen from Saltora, five from Ambikanagar and fifteen from Taldangra were covered. As the density of retail enterprises in town and rural areas are lower than that of the city areas, the higher number of markets were taken into consideration for making the sample number equal.

5.4 Research Population: Definition and Criteria

In all, two hundred fifty eight store retailers and one hundred twenty nine regular customer were interviewed through structured questionnaire in this study. The retailer for this study, is a person who is engaged in retail trade of consumer products and is consistently managing his trade with the help of this family members and or hired employees.

The retail store for this study, is a shop registered or permitted either by corporation or municipality or by the panchayats of that particular areas or by the department of commerce, Govt. of West Bengal. (Institutional retailing, itinerant and non-store or virtual retailing were not covered in this study). Though retailing itself a service business, but in this study, service retailing was not covered. Only merchandise retailing was taken into consideration. Sole Proprietorship form of ownership and 'store retailing' were also points of consideration. In this study shop, store, enterprise, organisation—these words were used interchangeably.

In this study the term 'Product' includes only the manufactured consumer product. It neither includes agricultural product nor includes the products of intangible nature. Only physical or tangible, manufactured consumer products (durable and non-durable) were taken into account for the purpose of this field study. Service were not taken into consideration as product. Product means tangible goods or merchandise not service.
5.4.1 Hypotheses

Precisely, the researches arrived at the following null hypotheses to be examined in the investigation:

The village market retailers will not show significant differences in their personal motivational, trade environmental and managerial attitudes from town market retailers and city market retailers.

Similarly, the town market retailers will not show significant differences in their personal, motivational, trade environmental and managerial attitudes from the village market retailers and city market retailers.

Further, the city market retailers will not show significant differences in their personal motivational, Trade environment and managerial attitudes from the town market and village market retailers.

5.5 Basic issues and their ramifications

The formulation of the following issues and their ramifications grew out of the researcher's concern with the personal background, motivational structure of the individual, environmental characteristics of the trade and the managerial experiences of the individual to be explored through interview and observation.

1. Personal Characteristics

Age, martial status, educational qualification residential area, family structure, Income, caste and religion.

2. Family Background

Traditional occupation of the father, grandfather and other members of the family, ancestral residence, State of origin.

3. Motivational structure

Basic needs in motivation for work, familial influence and inspiration, own perception towards this trade.
4. **Trade environmental variables**

Place of trade, size of trade, relationship with the consumers, suppliers, employees, state of competition, business environment.

5. **Managerial issues**

Issues related to finance, marketing, personnel management, quality of service, consumer satisfaction and development of team work.

5.6 **References**


5 Garret H.E and woodworth R.S. op. Cit., p 262

6 Wilkinson T.S. and Bhander kar P.L. op cit., p 358


8 " Table IV of R.A. fisher and F. Yates, Statistical table for Bilogical, Agricultural and Medical Research" in "Marketing Research Test and cases, by Beri G.C., Tata Mc Graw Hill, 1989, p 377
