Research Methodology

The primary aim of the study is to observe the behaviour of consumers and their preference for the brand of car. Research is a scientific and systematic search for pertinent information on a specific topic. The formidable problem that follows the task of defining the research study is the preparation of the design of the research project, popularly known as the “research design”. Decisions regarding what, where, when, how, how much, by what means and an inquiry or a research study constitutes a research design. This chapter offers guidelines to understand the methods adopted to accomplish the study, which would be useful for the present and future generation and the car making companies as well.

4.1.1 Research Design

Research design constitutes the blueprint for the collection, measurement and analysis of data. In this study the researcher has adopted descriptive research design. Descriptive research studies are those studies which are concerned with describing the characteristics of a particular individual or a group. Descriptive research includes surveys and fact-finding enquiries of different kinds. The main characteristic of this method is that the researcher has no control over the variables and he can only report what has happened or what is happening.

In a descriptive study the first step is to specify the objectives with sufficient precision to ensure that the data collected are relevant. Then comes the question of selecting the methods by which the data are to be obtained. In most of the descriptive studies the researcher takes out sample(s) and then wishes to make statements about the population on the basis of the sample analysis. Usually one or more forms of probability sampling or what is often described as random sampling are used. Under this sampling design every item of the universe has an equal inclusion in the sample.
4.1.2 Profile of the Study Area

The entire primary research was done in Krishnagiri and Dharmapuri districts; The present Dharmapuri district was then a part of Salem District. During British rule and even till 1947 Dharmapuri was one of the Taluks of Salem District, and it was formed as a separate District on 02.10.1965 with its headquarters in Dharmapuri. Dharmapuri District was bifurcated into Dharmapuri and Krishnagiri Districts on 09.02.2004.

Krishnagiri town is the headquarters of Krishnagiri District. It is one of the historical places in Tamil Nadu. Now, it is counted as one of the fastest growing district of Tamil Nadu. The geographical area of this district is 5143 sq.kms. It has 5 Taluks, 10 Blocks 2 Municipalities and 352 Panchayat villages. As per 2001 census, Krishnagiri District had a population of 34,77,317. Males constitute 50 percent and females 50 percent of the total population and 13 percent of the population was under six years of age. Krishnagiri’s average literacy rate is 72.4 percent, which is lower than the national average which is 74.0 percent. Male literacy is 79.7 percent and female literacy is 64.9 percent. Krishnagiri is emphasizing on education very much, for which in this district there are several famous Schools, colleges of different courses such as Medical, Engineering and Arts and Science Colleges. Krishnagiri is also a developing city due to urbanization and there is a drastic technological growth in all parts and sectors of Krishnagiri.

4.1.3 Construction of Tools and Pilot Study

The tools for collecting primary data were constructed by the researcher after proper observation of the study area. The questionnaire was administered on a sub-sample of the respondents drawn out of the ultimate sample. 80 consumers were selected for pilot study. The questionnaire has been pre-tested and validated so as to meet the accuracy and reliability. In the light of the experience gained, the questionnaire was revised suitably and finalised after a suitable scrutiny.
4.1.4 Period of the Study

The whole spectrum of the research work was divided into various levels and the researcher had worked on it. The researcher had planned the research at various levels during the period spanning from 2011 to 2014.

4.1.5 Period of Data Collection

The data were collected from the respondents for the period from January 2013 to June 2013.

4.1.6 Sampling Design

Sampling design is imperative in every scientific study. The researcher has selected Krishnagiri and Dharmapuri Districts for his research. The list of car owners was collected from the RTO office in both the Districts and it was found that in the selected offices, there were 2402 (Krishnagiri 1597 and Dharmapuri 805) car owners which is the population size of the potential respondents. A sample of 500 consumers, 300 respondents from Krishnagiri District and 200 respondents from Dharmapuri District were selected by using simple random sampling and by adopting lottery method to collect the data from the respondents.

4.1.7 Source of Primary and Secondary Data

To accomplish the objectives of the study, the researcher had to depend on both the primary and secondary data. Primary data are those which are collected afresh and for the first time and thus happen to be original in character. Secondary data are those which have already been collected by someone else and which have already been passed through the statistical process. The secondary data needed for the study was collected from the relevant journals, magazines, textbooks and websites. The primary data was collected from the rural consumers through questionnaire. To ensuring accuracy in data collection, the questionnaire has been translated into the regional language (Tamil).
4.1.8 Tools for Data Collection

Primary data was collected from the respondents using a questionnaires inorder to get the required data for the study. Questionnaire which contains 41 variables helped the researcher to find out the personal details, demographic status of car users, and the problems faced by them.

4.1.9 Framework of Analysis

To make this research a more scientific and systematic one, the researcher prepared a master sheet, formation of one way tables, cross tables, chi-square test to find out the factors contributing to the preferences for a particular brand of the car. Data Analysis was done with the help of SPSS package in computer. Variables and their association were analyzed through cross tables.

The collected data was analyzed with reference to each of the objectives of the study. Conventional tools like descriptive analysis (percentage analysis, average score analysis) and inferential statistics such as- Analysis of Variance (ANOVA) chi-square test, Factor Analysis were made use for the study.

4.1.9.1 Descriptive Analysis

Descriptive analysis which is also termed as percentage analysis was performed for each question of the questionnaire, mainly to ascertain the distribution of respondents in Krishnagiri and Dharmapuri districts under each category. Diagrams and charts are mainly used for the clear understanding of the data collected in pictorial form. Pie-charts and bar charts also were used for this purpose.

4.1.9.2 Average Score Analysis

After converting the qualitative information into a quantitative one using a three point scale, the average score was obtained from the respondents on various issues to determine the level of satisfaction over availability, level of opinion on price and level of influence on advertisements towards the consumption of car.
4.1.9.3 Chi-Square Analysis

The Chi-square analysis is used, to test the significance of association between the two attributes and to test the homogeneity or the significance of population variance. In other words, this technique is used to test the significance of the influence of one character over the other. All the tests were carried out at 5% level of significance.

4.1.9.4 t-Test

t-Test is based on t-distribution and is considered as an appropriate test for judging the significance of a sample, meant for judging the significance of difference between the means of two samples in case of small sample when population variance is not known. The relevant test statistic ‘t’ is calculated from the sample data and then compared with the probable value based on t-distribution for accepting or rejecting the null hypothesis. It may be noted that ‘t’ applies only in case of small sample(s) when population variance is unknown.

4.1.9.5 Analysis of Variance (ANOVA)

This technique is used, to draw inferences about whether the samples have been drawn from population having the same mean. This technique is used to investigate any number of factors which are hypothesized or said to influence the dependent variable. There may be variance between samples and also within sample items.

4.1.9.6 Factor Analysis

The various variables that denote the product attributes that determine the purchasing decision can actually be factored using factor analysis. This factoring of the variables helped to study the consumer behaviour easily.