CHAPTER 4

METHODOLOGY

This chapter aims to provide an account of various methods and techniques used in performing the research. It covers the research design, size of the universe, sample size, sampling strategy, tools of data collection and statistical tools used by the researcher.

4.1 METHOD OF DATA COLLECTION

Methods play a major role in every research. The achievement and success of the research depends upon the collection of relevant data, from various sources. Various methods have been recommended for research studies. Survey method is an important method among them. It is mainly used for social science, communication and media researches. The present study has adopted the survey method.

4.2 RESEARCH DESIGN

The research has adopted a descriptive research design, describing usage of educational media among different categories of students. The study attempts to describe the students’ awareness of the media inputs, possession of media tools, the places, the frequency and duration of usage, the extent of benefits derived from usage of media and the needs for media input felt by the students.
4.3 **UNIVERSE**

The universe consisted of the entire set of student population in the graduate level in the state of Tamil Nadu. The size of the universe has been estimated to be over 7 lakhs. According to the statistical handbook 2005, brought out by the Department of Economics and Statistics, Government of Tamil Nadu, literacy rate of Tamil Nadu is 73.5%. Out of 6.25 crore people only 4.05 crore are literate. It is high as compared to the India’s literacy rate 65.8%. A total of 7.02 lakhs students are studying in all the three to four years of undergraduate programmes in various colleges. In Tamil Nadu 14 Universities, 16 Deemed universities exist at present. Besides these, 503 Arts and Science colleges, 240 Engineering colleges, 74 other Professional colleges including Medical, Paramedical, Law, Culture and Music colleges are also functioning. While all the colleges are providing undergraduate (UG) courses, merely 65 per cent of the colleges offer postgraduate (PG) courses. Specifically, 4.61 lakhs students are studying UG in arts and science streams, while 2.10 lakhs students’ pursuing UG engineering courses. Further, 31,000 students are enrolled in medical, Paramedical and other specialized courses. The course-wise distribution of students includes B.A. (1.10 lakhs), B.Sc. (1.90 lakhs), B.Com (94 thousands), BCA (16 thousands), BBA (16100), BBM (8400) and BE (2.1 lakhs). Enquiries with university authorities of each of the districts provided the researcher with an estimation of the total strength of various strata of students enrolled at the time of the study. Accordingly, it was learnt that there were a total of 2.75 lakhs of rural students while urban students numbered to 4.27 lakhs in all the districts put together. The size of the universe in terms of the modes of education comprised of a total of 3.18 lakhs of students under the distance education mode and a total of 3.84 lakhs of students in the regular mode. It was found that a vast majority of the students have English as the medium of instruction. Official estimates put the Tamil medium students at 57 thousands, while students who were being
taught in English numbered 6.45 lakhs. The universe also comprised of 3.52 lakhs of male students and 3.50 lakhs of female students.

4.4 SAMPLE SELECTION FOR THE STUDY

The study attempted to investigate the role and effectiveness of modern electronic media in higher education in India. The selection of the sample was guided by the above delimitation of the research. Hence the sample respondents for the study were drawn from the undergraduate students of colleges in Tamil Nadu.

4.5 SAMPLE DESIGN

A total of 14 thousands respondents (2%) of the universe have been covered as the sample. Sample for this study was selected from among the undergraduate students of regular and distance mode streams in Tamil Nadu. The sample also comprised urban and rural students. Samples were drawn from different type of colleges like Arts, Science, Commerce, Engineering and Technology, Medical and Agriculture. In each place, a minimum of three colleges and a maximum of six colleges were included in the study, depending upon the actual number of colleges functioning in the place. In order to ensure greater diversity of colleges, both private and Government colleges were taken up as part of the sample. Study centers of Distance Education were selected based on convenience in each place. Centers belonging to Madurai Kamaraj University, Manonmaniam Sundaranar University, Periyar University, Annamalai University, University of Madras, Pondicherry University, Bharatidasan University, Bharathiyar University, Mother Teresa University, Tamil Nadu Open University and IGNOU were included for the study. Respondents were from three major types of courses
including Arts and Science courses (74.17%) and Engineering courses (15.12%) and other professional courses (10.71%).

Total number of respondents whose responses were taken up for analysis was 11760. In all 5880 from regular (2940 samples from urban and 2940 students from rural), and 5880 from distance mode (2940 samples from urban and 2940 from rural) were selected. Medical and agricultural courses are not conducted through distance mode and so they were not included in distance mode samples. Totally 14 places were selected for this study. Tamil Nadu has six larger cities (corporations) and hundreds of towns. These six cities are located at equal distances and almost cover the entire state. So the researcher selected all six cities. The places are Chennai, Salem, Trichy, Coimbatore, Madurai, Tirunelveli. Chennai is the largest city in Tamil Nadu and its population is very high. Large numbers of colleges function in and around Chennai and the student strength is also high. So, the researcher divided the place into two places i.e. Chennai 1 and Chennai 2. It helped the researcher to gather data without omitting a large section of students. Chennai 1 consisted of colleges situated inside of the city; Chennai 2 consisted of suburban areas of the city. And 7 towns are also selected at equal distances with different geographical locations and cover entire state. The towns are Kanchipuram, Thiruvannamalai, Villupuram, Erode, Tanjore, Dindigul, and Tuticorin respectively. Over 1000 questionnaires were collected from colleges offering regular courses as well as from study centers under the Distance Education in each of the places. Half-filled or unclear questionnaires were removed and the remaining questionnaires were selected from every place. Based on the average of incomplete responses, the researcher has taken up 840 respondents from each place for the final analysis. The description explains that a multi-stage cluster sampling has been adopted for the purpose of the research study. According to Kumar, (1999),
Figure 4.1 Places of Sample Collection in Tamil Nadu
this sampling method is highly suitable when the population is large as in the case of an entire state. The data was collected over for twelve months during the period from January 2005 to March 2006.

4.6 SOURCES OF DATA COLLECTION

The study made use of primary source and secondary sources for data collection. Primary data was collected by using questionnaires. Secondary sources were books, journals, online journals, websites, articles, reports, speeches, presentations, government publications and authorities of various universities who shared data with the researcher.

4.7 TOOLS

Data was gathered using a questionnaire prepared specially for the purpose. The variables used in the study have been derived from the contents of a focussed group discussion held with a group of students on the theme of educational media. The tool comprised of the questionnaire divided into six parts. Part I is on personal background information of respondents including their name, sex, age, family income. Part II is on the accessibility of various media, Part III radio listening pattern. Part IV is on TV watching pattern, reason for watching, type of material they are looking for, watching of UGC-CWCR, Gyan Darshan channels and their usefulness. Part V contained questions about access and usage of internet, frequency, purpose for using internet, its benefit, browsing of online newspaper. Part VI composed of questions on rating of media. Twenty per cent of the students were personally met by the researcher and the filled up questionnaires were got directly. The researcher delegated the task of data collection to trained research investigators to cover the rest of the respondents under his supervision.
4.8 PROCEDURES FOLLOWED IN COLLECTING DATA

Before the survey the questionnaire was pre-tested with 100 students representing all the strata used in the study, from Anna University and Nandanam government arts college, Chennai. As a result of the pre-testing, the researcher rearranged the sequence of a few questions in order to ensure greater coherence. One section comprising questions combining usage of different media was deleted as the data that emerged through these questions was merely a repetition of earlier responses. Open ended questions pertaining to frequency and duration of usage of media were changed into close ended questions with specific choices.

4.9 DATA EXPERIENCES

The researcher found the students to be enthusiastic in responding to the study in general. The researcher observed that many of the students had come to know for the first time, about some of the educational media opportunities available, only at the time of the research, by going through the questionnaire. The students expressed regret about the fact that no one had briefed them about the need to use various educational media, including Gyan Vani and Gyan Darshan. The researcher also found that the management bodies of many colleges were quite averse to the idea of researching media usage among their students. This made it necessary for the researcher to meet students off their campuses. A notable fact that emerged during the data collection was that many principals and faculty members were also ignorant about the latest educational media and programmes available.
4.10  TOOLS USED FOR DATA ANALYSIS

For the convenience of data recording and analysis, the data was edited, coded and tabulated accordingly. Quantitative as well as qualitative methods were adopted to analyze the data. Chi-square test is a measure to study the differences between the actual and expected frequencies. It was used to test whether specified variables were independent using the contingency table pattern, of frequencies attributed to these variables. The simple percentage method was applied to examine the change in the influence level of various variables. Besides the two, the researcher also used Friedman’s two-way ANOVA and cross-tabulation for the purpose of the study.

4.11  PRESENTATION OF RESULTS

The results of the study are presented in the following categories with the help of tables, illustrations, diagrams or charts with relevant interpretations so as to arrive at the findings with accuracy.
Figure 4.2 Flow Chart of the Research Study

1. Conceptual Frame Work
   - Collection of information about educational media in India
2. Planning of Study
3. Formatting of Methodology and Research design
4. Sample Selection
   - Identified target groups
5. Questionnaire Preparation
   - Pre-testing of questionnaire
   - Finalization of questionnaire
6. Field survey in 14 locations in Tamil Nadu
7. Data Collection
   - Coding of questionnaire
8. Data analysis
9. Submission of research report
4.12 LIMITATIONS OF THE STUDY

The few limitations of the study are stated as follows

1. The findings of the study are based on expected information of respondents, which may have its own limitations. The objectivity of the researcher is naturally restricted by the extent of the respondents’ tendencies to give real information. Possibility of hiding certain facts on the part of respondents could not be completely ruled out, although every possible effort was made to elicit authentic information.

2. The technique for the collection of data employed by the researcher was that of self administered questionnaires. Therefore, the outcomes of the study are limited to this technique of data collection.

3. The scope of the research is limited to students belonging to Tamil Nadu. Hence the findings of the study have their own limitations and can be made applicable elsewhere, with certain precautions.

4. Since the study had to cover usage patterns of various educational media, analyzing the causes of the existing usage patterns were not within the scope of the study.

5. Low level of awareness among the educators and the students posed a major challenge to the task of eliciting further opinions on the media.