CHAPTER 3

Research Methodology

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Research Methodology

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3.1 - Introduction

This topic is explores the Problem Statement, Scope, Objective, Need and Research Methodology of the study. The present study on “An Empirical Study of Students Perceptions about Distance Learning through Satellite Broadcast”, its further discussed Research Design, Sampling & Sample size, Research Area, Processing and Analysis of Data.

3.2 - Problem Statement

Globally, virtually all countries are facing the multiple challenges like expanding access, improving quality, and ensuring equity especially in higher education. Reinforcement this challenge is the growing, enormous, and urgent need to train, retrain, and continuously refresh the knowledge. Also skills of each nation workforce in an increasingly globalised knowledge world economy. The problems can be solved if there is increased awareness and appreciation for the potential of Distance Education and Learning, including electronic learning, in increasing access to higher education.

3.3 - Scope of the study

University of Delhi in 1962 has taken an experiments in the field of distance education. The university experiments were too micro at that time to fulfill the objectives of national perspective which has predicted. In the present condition after H.S.C. education student has admitted to a full time basic course or go without education all together. Therefore it results demand for getting higher education from regular seats. One simple solution to this problem is an correspondence course, part time course, distance learning, electronic learning etc. Also provides a satellite broadcast in the rural area for distance learning. Therefore the researcher hope this study will give new direction to stakeholders to formulate planning for development of distance learning through satellite broadcast.
3.4 - Objective of the study

The study is primarily to understand the Perceptions of students about Distance Learning through Satellite Broadcast and its benefits for growth of higher education.

❖ To assess the growth of Distance Learning in India.
❖ To review the Students perceptions about Distance Learning.
❖ To analyses on growing activity of Distance Education.
❖ To evaluate the service quality offered by Satellite Broadcast.
❖ To interact with students and have their review.
❖ To know the students requirement at rural areas.
❖ To define the benefits of Distance Learning through Satellite.

3.5 - Hypothesis

Following different hypotheses have been tested in relation to the research study.

H1: There is a large scope for the development of Distance Learning through Satellite in rural and semi-urban areas and as a sustainable activity for educational growth.

H2: There is a requirement of satellite broadcast for healthy Distance Learning in rural and semi-urban areas.

H3: There are several benefits of distance learning through satellite broadcast and students from rural areas required the same.

H4: There is a strong association among various demographic factors like Age, Occupation and Income with the Awareness Level of the students towards Distance Learning.
3.6 - Research Methodology

Research methodology means a blueprint or framework for conducting the actual research. The procedures for necessary data obtaining needed which also helps in solving the research problem. Therefore it is foundation of doing the research. Therefore it is also said that this is a path of finding solution of research questions. A good research methodology indicates the proper research work.

3.6.1 - Research Design

The researcher plans to present the study in the form of Descriptive research. The research study based will be Quantitative as the researcher will be adopting the Survey method to collect the data. The researcher plans to collect data for the research study through primary and secondary sources.

**Primary Sources:** Primary data is collected through questionnaire posed to students experience about distance learning through satellite broadcast. This will result into understanding the benefits, Impact and prospect of distance education where it is being used.

**Secondary Sources:** For any information or data to be complete, the researcher has to mostly depend upon information from existing sources. The researcher will assimilate the essence from the information taken from various secondary sources.

- The researcher will also make use of data published by the various commercial institutions.
- The research will depend upon information collected from the print media such as magazines, journals and newspapers.
- Any existing work done on similar topics by others.
- Information gleamed from the internet and other published data like conference proceedings, reference books etc.

3.6.2 - Sampling & Sample size

Samples of the study consisted of students of HSC, under graduate and post graduate. The study is restricted to analysis responses of 300 students studying Distance Learning in Mumbai. Convenience samples are drawn from Colleges,
Coaching Classes, Study Centers and Libraries. The primary data was collected from targeted students while they relaxing through questionnaires.

3.6.3 - Research Area

The geographical area to be covered in the research will be Mumbai. This area has been selected primarily due to students from rural area and other corners of Maharashtra came forward for education need. Because in the Rural Area there are still requirement of proper higher education or satellite broadcast for distance education. The researcher opinion that the development of distance education through satellite broadcast is required for development of Rural India.

3.6.4 - Processing and Analysis of Data

The collected data will be edited to avoid unwanted information & will be arranged in proper sequence. Processing and analysis of data involves in answers to the research problem. Processing of data refers to consolidation, recasting or regrouping of data so that the job of analysis is made very easy. While analysis of data refers to seeing the data in the light of hypothesis and the prevailing theories and which help to drawing conclusion. The edited data will be edited & classified for suitable tabulation, graphs, charts, diagrams wherever necessary.

3.6.5 - Hypothesis Testing

The hypothesis has been tested by using the statistical tools such as Non Parametric Tests. Chi Square Test and Kolmogorov Smirnov Test has been taken into consideration. In addition to the above hypothetical tests, the statistical tools like simple percentage method, Pearson Correlation, Cluster Analysis and Factor Analysis are used for analyzing data.
3.7 - Mumbai at a Glance

The Mumbai name is an etymologically eponym derived from Mumba or MahaAmba. It is the combination of Mumbadevi the name of hindu goddess and Aai means Mother in marathi language. The earlier name Bombay which has its original since from the 16th century. Mumbai is the hub of education and learning. It has come up as the desired destination of the students in the entire South East Asia of the country. Mumbai houses a wide array of research institutions, making it one of the most sought after research hub of India. Bhabha Atomic Research Centre and Tata Institute of Fundamental Research are two prominent names in the field of research in Mumbai. Education in Mumbai has not only achieved qualitative excellence but also provided education to the maximum number of people through expanded network of schools Primary as well as Secondary, colleges and universities in both traditional and distance way of education. Success of the educational initiatives can be observed in the literacy rate of Mumbai, which stands at 88.48% as per 2011 census as compared to 86.40% of 2001.

The strong base of education in Mumbai is created through the wide network of primary, secondary, higher secondary schools and college levels. If it is consider the total number of schools, CBSE and ICSE affiliated school, secondary and higher secondary schools then the total number goes way above four thousand. Educational infrastructure of higher education is also very muscular because of the presence of large number of qualitative universities and colleges. There are 12 universities and more than three hundred colleges in Mumbai itself.

<table>
<thead>
<tr>
<th>Description</th>
<th>2011</th>
<th>2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actual Population</td>
<td>3145966</td>
<td>3338031</td>
</tr>
<tr>
<td>Male</td>
<td>1711650</td>
<td>1878246</td>
</tr>
<tr>
<td>Female</td>
<td>1434316</td>
<td>1459785</td>
</tr>
<tr>
<td>Population Growth</td>
<td>-5.75%</td>
<td>5.14%</td>
</tr>
<tr>
<td>Area Sq. Km</td>
<td>157</td>
<td>157</td>
</tr>
<tr>
<td>Density/km2</td>
<td>20038</td>
<td>21261</td>
</tr>
<tr>
<td>Proportion to Maharashtra Population</td>
<td>2.80%</td>
<td>3.45%</td>
</tr>
</tbody>
</table>

Table 3.1 : Mumbai District at a Glance
3.7.1 - High Tech Education and Initiatives

State Government and local authorities have realised the importance of Information Technology and thus an initial investment of five crore rupees has been done by Maharashtra knowledge Corporation, a newly constituted body. This project has been started to provide IT-enabled education to colleges, educational institutions and universities. At present some of the institutes that provide IT-enabled education in Mumbai are vivekanand education society institute of technology, veermata jijabai technological institute and Indian institute of technology, bombay.

3.7.2 - Primary, Secondary and Higher Secondary School

Schooling creates the base of children. Thus, every child in India should have a proper schooling. But, till date this has not been achieved. However, Mumbai is striding forward to provide its inhabitants with basic schooling facilities to children. In fact, literacy rate in suburban Mumbai has crossed the 90% mark, as per the provisional data of census 2011. The figure states the strong base of Primary, Secondary and Higher Secondary School education in Mumbai.

3.7.3 - Education in Colleges and Universities

As already mentioned, highest quality of education in Mumbai has made it the preferred education hub of South East Asia of the country. Colleges in Mumbai offer a variety of streams and subjects including Arts, Commerce, Science, Management, Engineering, Social Work, Law, Medical, Physical Education, Pharmacy, Fine Arts and many more. Apart from the regular colleges, there are many colleges that offer specialized subjects. Junior College level is studied in almost all the colleges. Higher Secondary Education and Maharashtra State Board for Secondary govern Junior Colleges.

Mumbai is the hot spot for pursuing research on every field of the subject. There are twelve universities in Mumbai and various renowned research institutes too. This creates perfect environment for students to pursue their higher education and research. This is why students throughout India have started to prefer Mumbai over other cities for their higher education as well as research.
### Table 3.2: Education Statistics in Mumbai

<table>
<thead>
<tr>
<th>Description</th>
<th>Census 2011</th>
<th>Census 2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Literacy Rate</td>
<td>88.48%</td>
<td>86.40%</td>
</tr>
<tr>
<td>Male Literacy Rate</td>
<td>90.54%</td>
<td>90.23%</td>
</tr>
<tr>
<td>Female Literacy Rate</td>
<td>86.03%</td>
<td>81.38%</td>
</tr>
<tr>
<td>No. of People called Literates in Mumbai</td>
<td>2551669</td>
<td>2590613</td>
</tr>
<tr>
<td>No. of General Studies Colleges</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>No. of Engineering &amp; Technical Institutes</td>
<td>67</td>
<td></td>
</tr>
<tr>
<td>No. of Management Institutes</td>
<td>46</td>
<td></td>
</tr>
<tr>
<td>No. of Applied Arts Colleges</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>No. of Law Study Centers</td>
<td>14</td>
<td></td>
</tr>
</tbody>
</table>

#### 3.7.4 - Distance Education in Mumbai

This type of education is mostly apart for those students who are either financially weak or do not have the time and scope to pursue traditional regular education. This is why busy professionals, economically weaker students, businessmen and housewives mostly go for distance education, which is available at comparatively lower cost. The availability of Distance Education and utilization is more in Mumbai as compare to other cities of India.