METHODOLOGY

3.1 INTRODUCTION

This chapter deals with the methods used for the study of population, sample, tools used, description of the tools, administration of the tools and statistics used.

Methodology is the procedure adopted by the investigator in conducting the investigation. According to Good (1945), "Methodology is the science of methods or principles of procedure".

3.2 OBJECTIVES OF THE STUDY

a) To find out the types of information sources available and its usage.

b) To identify the utilization of Traditional and Electronic Resource in Higher Educational Institutions.

c) To study the users involvement and attitude in resources in Higher Educational Institutions

d) To identify the difficulties faced by users while using both resources.

e) To find out the user opinions towards the values and important of the both resources.

f) To analyze the users perceptions about the adequacy of the both resource collections in the changing environment.

3.3 HYPOTHESIS

There is significant difference in using the traditional and e-resources for Information gathering Accessibility of Resources (General), Accessibility of Resources (specific), extent of use, keep up to date of current developments and events in your filed, viability, feasibility, prefer to give up printed material if you have access to electronic versions with respect to their gender, subject and visit.

1. There is significant difference in the mode of using resources for their information gathering with respect to gender.
2. There is significant difference in the accessibility of General resources with respect to gender.
3. There is significant difference in the accessibility of Specific resources with respect to gender.
4. There is significant difference in Extent of use of the traditional and e-resources with respect to their gender.
5. There is significant difference in the mode of up-dating current developments and events with respect to gender.
6. There is significant difference in the viability of using resources with respect to gender.
7. There is significant difference in the feasibility of using resources with respect to gender.
8. There is significant difference in the preference of e-resource to give up in relation to print resource with respect to gender.
9. There is significant difference in the mode of using resources for their information gathering with respect to subject.
10. There is significant difference in the accessibility of General resources with respect to subject.
11. There is significant difference in the accessibility of Specific resources with respect to subject.
12. There is significant difference in Extent of use of the traditional and e-resources with respect to their subject.

13. There is significant difference in the mode of up-dating current developments and events with respect to subject.
14. There is significant difference in the viability of using resources with respect to subject.
15. There is significant difference in the feasibility of using resources with respect to subject.
16. There is significant difference in the preference of e-resource to give up in relation to print resource with respect to subject.

3.4 METHOD USED FOR THE STUDY

Research methods are of utmost importance in a research process. A pre-planned and well – described method will provide the researcher a scientific and feasible plan for attacking and solving the problem under investigation. Mouly has classified research methods into three main categories namely historical method, survey method and experimental method.

The investigator has adopted survey method of research to study the utilization of traditional resources and e-resources in higher education – a comparative study on user point of view. Survey research is a procedure in which information is systematically collected from a population through some form of direct solicitation such as face to face interview, administering questionnaire.

A worthwhile survey study can collect three types of information.

1. Of what exists by studying and analyzing important aspects of the present situation.

2. Of what we want by clarifying goals and objectives possibly through a study of the conditions existing elsewhere or what experts consider being desirable.
3. Of how to get these through discovering the possible means of achieving the goals on the basis of the experiences of others or the opinions of experts.

The present study is to know the utilization of traditional resources and e-resources in higher education.

3.5 SCOPE OF THE STUDY

For any type of research work, scope is more essential. Without scope, the researcher cannot collect the data in a stipulated time. In this research work, the utilization of traditional resources and e-Rresources in higher education of selected universities namely Madurai Kamaraj University, Manonmaniam Sundaranar University, Bharathiyar University, Bharathidasan University of Tamil Nadu have been selected for this study.

Resources available in the traditional and e-resources of above mentioned universities, library users are taken in to account. The research work stresses on usage of traditional and e-Resources of library.

The significant difference in the utilisation of the two resources namely traditional and e-resources is the major study.

3.6 LIMITATIONS OF THE STUDY

1) The boundary of the research work is limited to four selected universities of Tamil Nadu namely Madurai Kamaraj University, Manonmaniam Sundaranar University, Bharathiyar University, Bharathidasan University.

2) Since the population was more, the researcher has taken only 765 respondents samples.
3) The researcher found the little hardship while collecting data from the respondents, since they were busy other works also.
4) The resources are limited to Traditional and Electronic resources. In traditional only printed resource has been considered and the out dated resources like palm leaf, copper plates, clay plates, etc are left out from this study.
5) The variable subject is categorized in to two i.e Arts, Science for researcher convenience / familiarity with respondents
6) The primary secondary and tertiary resources are limited on the basis of familiarity and frequency of utility.
7) Apart from the above limitations, the study is deemed to be correct according to the researcher knowledge.

3.7 POPULATION FOR THE STUDY

The population is consisting of students pursuing the higher education of above four selected universities of Tamil Nadu.

3.8 DESCRIPTION OF THE TOOL

A brief description of the tool has been presented here. Questionnaire method is used for data collection. The questionnaire format is very easy and simple for respondents. All the users are come to library for some specific purpose. There is not necessary to select all categories by the users. So, the questionnaire construction is the

respondents can select any one or two or both or may be left out. The left out can treated as non selected users.

A well structured pre-tested questionnaire developed for the purpose. This developed Questionnaire are issued to respondents and collected answers from students of four universities namely 1)Madurai Kamaraj University,(2) Manonmanium Sundaranar University,(3) Bharathidasan University,(4) Bharathiyar University. While the students are visiting the library, the questionnaires are distributed to students and data are collected.

The questionnaire consists of six major divisions like 1) Personal data, 2) Preference for information gathering, 3) Accessibility of Resources (General), 4) Accessibility of Resources (specific), 5) keep up to date of current developments and events in your filed 6) viability, 7) Feasibility and prefer to give up printed material if you have access to electronic versions, and 8) Extent of use.

After collecting data, they are manipulated and tabulated for finding the results. The filled up questionnaires were arranged by University wise and analyses is taken place based on three variables i.e. Gender, subject and visit.

3.9 SAMPLE FOR THE STUDY

The investigator has used random sampling technique for selecting the sample from the population.

. **TABLE 3.1 LISTS OF UNIVERSITIES SELECTED FOR SAMPLING**

S.No	Name of the Institutions	Number of Questionnaire issued	Number of Questionnaire received	Percentage
1	Madurai Kamaraj University	200	195	99%
2	Manonmaniam Sundaranar University	200	193	99%
3	Bharathiyar University	200	192	98%
4	Bharathidasan University	200	194	97%
	Total	**800**	**774**	**96.75%**

Total numbers of 800 questionnaires were issued, out of these 774 (96.75%) questionnaire were collected and incomplete 9 questionnaires were rejected. For researcher convenient 765 respondents were selected for analysis purpose. Among them 346 are male and 419 are female.

TABLE 3.2 SEXWISE DISTRIBUTION OF THE SAMPLE

Sex	No. of Students	Percentage
Male	346	45.23
Female	419	54.77
Total	**765**	**100**

The above table shows that there are 45.23% male and 54.77% female users.

TABLE 3.3 SUBJECTWISE DISTRIBUTION OF THE SAMPLE

SUBJECT	No. of Students	Percentage
Arts	321	41.96
Science	444	58.04
Total	**765**	**100**

It is inferred from the above table that there are 41.96% of respondents are belongs to Arts departments and 58.04% of respondents are belongs to Science departments.

3.10 TOOLS USED

The tool used in the present investigation has been constructed by the investigator in consultation with his guide and experts.

3.11 STATISTICAL TECHNIQUES USED

Statistical techniques are very essential for any research. It will help the investigator to analyze and interpret the data. In the present investigation, the following statistical techniques are used:

Chi-square

The chi-square (χ^2) test is used to determine whether there is a significant difference between the expected frequencies and the observed frequencies in variables.

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

Where,

χ^2 = Chi-square

O = Observed frequencies

E = Expected frequencies

Degrees Of Freedom used to find out the significant difference has been calculated from the following formula

Degrees Of Freedom = df = (R – 1) (C -1)

Where, ‘O’ = Observed Frequency

‘E’ = Expected Frequency

‘R’ = Number of Rows

‘C’ = Number of Columns.