CHAPTER 3
RESEARCH METHODOLOGY

3.1 Introduction

In the first chapter, problem is stated and objectives of the study are formulated. In the second chapter, a brief review of related research is presented. In this third chapter, researcher sketches the methodology of the study where in, details about population, sample, sampling methods, tools used for collecting the data, procedure of the data collection, analysis of the data and statistical methods used for the present study.

The present study focuses on the availability of infrastructure, availability of academic assistive devices; assistive devices for visual impairment (blindness and low vision), hearing impairment (deaf and hard of hearing), neuro-muscular / locomotor disabilities, mental retardation and learning disabilities (As defined under the Rights of Persons with Disabilities Act, 2016) in different schools.

3.2 Research Method

Research methodology is an important process to evaluate the research problem effectively. It includes the main stages related to research approach such as identifying data requirements, tools and techniques by which data is gathered and analysed.

The present study is simple quantitative in nature and the entire study is designed to carry out under descriptive survey. The main purpose of this approach is to arrive at the results through proper sampling, analysing and interpretation of the data.

3.3 Research Design

The research design is the overall plan and strategy of the research work to be carried out in a structured manner. The researcher has developed tools to study the availability of assistive devices for differently abled students. Quantitative approach consisting research design has been followed as a framework for collecting, analyzing and interpreting the data. This has been used to collect required information for better results of the present study in a well-organized manner.

3.4 Population

Population is a group of individuals that has one or more characteristics in common. The population of this study consists of government, private and aided schools (Primary / Middle / Secondary / Higher Secondary schools) of Bhopal.

3.5 Sample

In the present study, stratified random sampling technique has been used for the selection of thirty schools. Stratified random sampling is a sampling procedure used when representative samples must be drawn from two or more population frames for a single study. This method is used to represent the entire population.

This study targeted Head of the school (Principal/Headmaster/Headmistress) to collect the required data. The information acquired from these schools has been used for the research findings.

3.6 Tools Used

Data collection tools are also called research tools and these tools are very important and should be relevant, reliable and valid for any kind of research. The researcher has been gone through literature of the research problem but didn't come across much more suitable tools for the study.

Hence, the researcher developed and adopted tools for the present study from a discussion paper of WHO-UNICEF, 2015. Checklist for the availability of assistive devices for differently abled students in schools has been formulated for the present study.

3.7 Data Collection

Data collection is the process of collecting and measuring the data on targeted variables through a thoroughly established system to evaluate outcomes by answering relevant questions.

In the present study, a checklist has been provided to the Head of the schools to fill the information about the availability of infrastructure and assistive devices for differently abled students in the school. After the data collection, obtained information has been formulated as a table.

3.8 Data Analysis

Data analysis is the process of collecting, modelling, and analyzing data using various statistical and logical methods and techniques. In the present study, obtained data were analysed using statistical methods. Statistics are generally used to measure the collected data in a logical, meaningful and efficient way. There are majorly two types of statistics namely descriptive statistics and inferential statistics.

Descriptive statistics is a summary statistics that quantitatively describes the properties of sample and population data and summarizes features from a collected data. Descriptive statistics is the process of using and analysing those statistics to describe the main features of the data and provides an overview of the data to identify patterns and relationships. Descriptive statistics have been reported numerically in the manuscript text in its tables and graphically in its figures.

In the present study, descriptive statistics are used to analyse the characteristics of the data which consists of bar and pie charts. Frequency and percentage have been used to know the availability of assistive devices for differently abled students in schools. This provides valuable information about the nature of a particular group of study.