## Research Methodology - 1

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## Research Highlights

- The search for knowledge through objective and systematic method of finding a proper and feasible solution to a problem is popularly known as research.
- Defining research.
- Research, according to Redman and Mory is a "systematised effort to gain new knowledge".
- In the words of Slesinger and Stephenson, research is, "the manipulation of things, concepts or symbols for the purpose of generalising to extend, correct or verify knowledge whether that knowledge aids in construction of a theory or in the practice of an art".
- Research is directed towards the solution of a problem.
- Emphasis on the development of generation of principles or theories that will help in predicting future occurrences is yet another characteristic of research.
- Research is based upon observable experience and or empirical evidence.
- Expertise skill to carry out investigation, to search for the related literature and to understand and analyse the data gathered, is the pre-requiste of a research.
- · Research is carefully recorded and reported.

### The Various Criteria of Good Research

- At the outset there should be a clear-cut declaration of the purpose of the research.
- The research procedure adopted should be described in detail to help succeeding researchers to repeat the research for further advancement, maintaining the continuity of what has already been attained.
- The analysis of data should be adequate to reveal its significance and the methods
  of analysis used should be appropriate. The validity and reliability of the data
  should be checked and cross-checked with utmost care.

## Objectives of a Research

The main aim of the research is to find out the hidden truth of a particular problem hither to undiscovered. The following are the other objectives:

- To highlight the significance of the phenomenon understudy.
- To develop new tools, concepts and theories for a better study.
- To focus on the characteristics of a particular individual, situation or group.

- To determine the frequency of occurrence of a particular thing which is associated with something else.
- To test the hypothesis of casual relationship between variables.
- To write the report based upon the findings of the research.
- Research aids planning and thus contributes to national development.

## Various Types of Research

There are various types of research. Based on the objective, the important classifications are listed below:

- Applied Research
- Analytical Research
- Descriptive Research
- Exploratory Research
- Experimental Research
- Pure or Fundamental or Basic Research
- Historical Research
- Other types of Research

# **Applied Research**

Applied research aims at finding a solution for an immediate problem faced by the society or a business organisation. For example, a research undertaken to study the causes of Dengue fever in a particular area is applied research. The study conducted to identify the problems of marketing of a particular product is also an example of applied research. Thus the main aim of an applied research is to discover a solution for the existing problem. This type of research has practical utility to the society, individuals and business organisations.

## **Analytical Research**

In this type of research the available information or data are thoroughly analysed and critical evaluations are made to solve the problems. The study on the growth of population during post independence period conducted by the census department falls under this category. A study on the financial performance of, say, State Bank of India is another example of this type.

### **Descriptive Research**

This type of research aims at highlighting the state of affairs of existing problems. It is a simple report of happenings both past and present. It also reports the characteristics of a particular Individual, Situation or group and also the frequency of occurrence of an event like, the frequency of accidents in a particular place. If the report presents the results on the basis of actual happenings such descriptive research is called 'Expost Factor Research'.

### **Exploratory Research**

The research with an indepth or detailed analysis is called exploratory research. This type of research is applied when conclusive results could not be obtained in the first or preliminary level of study of the problem. The objective of exploratory research is the development of hypotheses rather than their testing.

The main purpose of an exploratory study is to generate new ideas or to increase the researcher's familiarity with the problem or to make a precise formulation of the problem.

## **Experimental Research**

Greater control over the research environment is the chief characteristic of experimental research. It involves a laboratory experiment which is the basic tool of analysis in the natural and physical sciences. This type of research is helpful to know the cause and effect relationship under the controlled experiments. This research can be carried out either on the basis of trial and error method or under controlled experiment method.

### Historical Research

Proper and prompt use of historical sources such as documents, remains, sculptures, coins and the like for the study

Events or ideas of the past, or its trend, facts and attitudes makes a research Historical Research. Hence, the researcher is expected to possess much social insight and historical orientation for this purpose.

## Other types of Research

Quantitative research is that type of research which is based on the measurement of quantity. Qualitative research is that type of research which is based on qualitative phenomenon.