#### CHAPTER # 03

#### RESEARCH DESIGN

Lecture no: 09

In today's lecture we will go through the following points.

- > Definition of Research design
- > components of research design
- > Characteristics of research design
- > Types of research design

# RESEARCH DESIGN

Research design is the core or essence of social research. It is a guide step for the researcher to carry on his/her research work. It is evolved to answer the research questions.

Research design is the detailed plan for a research study. It is a plan or structure used for conducting or carrying out research work, without this plan a researcher can not reach to the destination.

In research design a researcher decides that what is the study about? why the study is being made? where the study be carried out? what type of data is required? how a sample be drawn? how much time is required for study? what tool of data collection be used and how the data be analyzed?

### **DEFINITIONS OF RESEARCH DESIGN**

According to Miller

"Research design is a planned sequence of the entire process involved in conducting a research study".

According to Bhattacharjee

"A research design is a comprehensive plan for data collection aimed to answer specific research questions or testing specific hypotheses in empirical research".

# COMPONENTS OF RESEARCH DESIGN

Below are the components of social research, which a research design must posses.

# 1) Universe/Population

The specific area or population where a researcher conducts his research.

### 2) Research method

Which method a researcher follows in the research in hand is mentioned in the research design, e.g. exploratory research, explanatory research, experimental research, survey research etc.

### 3) Constructing Questionnaire/Interview guide

To collect the primary data a researcher construct questionnaire or interview guide. It is usually a set of questions.

#### 4) <u>Sampling Technique</u>

Different techniques of sampling are there, which a researcher selects for his research, i.e. simple random sampling, stratified sampling, snow ball sampling, purposive sampling, systematic sampling etc.

### 5) <u>Sample Size</u>

How many cases or individuals are drawn from the universe to collect the data from is known as the sample size.

### 6) Tool of Data Collection

Which tool of data collection is used in collecting the data, i.e. Questionnaire, interview guide, FGD etc.

# 7) Tool for data analysis

Which tool is used in analyzing the data. the SPSS, pie charts, chi square, tables, co-relations etc.

# 8) <u>Time frame</u>

How much time is required for the research in hand to be completed is the part of research planning.

# 9) Report writing

How the report be formed after completing the research study. How many chapters be there, the size, the sequence etc.

#### CHARACTERISTICS OF RESEARCH DESIGN

Some characteristics of research design are given below

# 1) Objectivity

The research design may not include irrelevant things or ingredients except its parts. The researcher may include only those things which are directly related to the research.

# 2) Relevant to the nature of the problem

Problems are of different nature, no two problems will be the same. Some are general and some are specific. So, in this context the design must be different according to nature of the problem. A strategy evolved for one research can not put for the other one.

# 3) Answer the research questions

A research design should have the capability to answer the research questions, because it is structured to answer the research questions. If it doesn't meet the research questions, it will not be considered a successful design.

# 4) Statisfy all the components

The components prescribed above should be thoroughly satisfied and mentioned in the research design to complete the study.

# 5) Single design can be valid for a single research

Each research has different nature like mentioned above. So, a design made for one research can not be applied for the other one.

# TYPES OF RESEARCH DESIGN

Following are the types of research designs

# 1) Exploratory research design

In exploratory research a researcher explore or discover some new thing or idea. It mostly consists of "what" questions, when a researcher is unaware of the topic or having very less knowledge about the problem.

# 2) Descriptive research design

The research conducted on the current position of any problem, that what is going on. The researcher has much knowledge about the problem which is under his study.

# 3) Experimental research design

modifying some thing in its nature is called experiment. In experimental research a researcher establishes relationship between the two variables(the cause and effect or independent variable and dependent variable). An experiment attempts to show that changes in one variable are directly responsible for changes in the second variable. It is also called laboratory research. Because it is mostly practiced in natural sciences.

THE END