

Research Design: Types: ①

Ideally, designing social research is the process of making all decisions related to the research project before they are carried out. This involves anticipating all aspects of the research, then planning for them to occur in an integrated manner.

→ In other words, to design is to plan, that is, design is the process of making decisions before the situation arises in which the decision has to be carried out. Thus research design are plans that specify how data should be collected and analysed. * It is planning a strategy of conducting research.

→ The research design should be made once the topic and problem of research have been selected and formulated, objectives underlined, concepts defined and the hypothesis properly framed.

The major components of research design are as follows:

1. Title
2. Statement of the topic / problem
3. motives and Goals
4. Review the literature
5. Research strategies
6. Concepts, theories, hypothesis and models
7. Research questions & objectives
8. Data sources, types & forms
9. Selection of data sources
10. Data collection and Timing
11. Data Reduction & analysis

* It plans as to what is to be observed, how it is to be observed, when/where it is to be observed, why it is to be observed, how to record observations, how to analyze/interpret observations and how to generalize. Thus Research design is a detailed plan of how the goals of research will be achieved.

Types of Research design are based on the objectives of the study. Accordingly research design can be classified into exploratory design, Descriptive design and experimental design.

→ There are three types of Research Design are based on the
1. Exploratory Research Design. When the problem under investigation is new it is unlikely that literature is available on that topic, as a result it is extremely difficult to formulate a hypothesis or relate it with some theories, concepts, models and parameters. In that case the problem is formulated in such a manner that it is exploratory in nature. Thus exploratory research is carried out where when there is

no sufficient information ~~and~~ available ^{is} about the issue or problem to be studied. For example if we plan to do a research on impact internet on remote Indian villages, it is unlikely to find sociological literature. In an absence of literature, it ^{will be} difficult to formulate meaningful hypotheses or develop sociological concepts, models, parameters and theories. The research in such a case would be exploratory in nature. The main purpose of exploratory Research Design is to gather preliminary data and insight of the problem. Malinowski studied Trobriand Islanders with this research method. The methods adopted in exploratory designs are literature review, consultation with experts or expert survey (interview with experts who have substantial knowledge in the research area, and case studies.

2: Descriptive Research Design:

The Descriptive Research Design is carried out to describe events, phenomena and situations. Descriptive designs are more structured. It need a representative sample. Descriptive studies presuppose prior knowledge of the problem to be investigated. Since description is made on the basis of scientific observation, it is expected to be more accurate and precise than casual. Many anthropological studies of various tribes are primarily mere descriptive and characteristics of people under investigation. The descriptive Research Design makes a detailed account of the problem on the basis of informal and non-controlled observation. Some examples of descriptive research are, the nature and magnitude of domestic violence against women, alcoholism among youth, study of drug abuse, exit polls conducted by various organisations describing the voting pattern of electorate & so forth. Many anthropological studies of various tribes are primarily mere descriptive and characteristics of the people under investigation. Most anthropological research may be characterized as descriptive in as much as the thrust is on portraying a rounded picture of a total culture or some aspect of it.

(3) Experimental / Analytical (3) Research Design

The experimental studies attempt to deal with problems in which we ask how events are related to one another. It deals with cause-effect problems.

An experimental Research design is considered the most preferable. In this the experimenter manipulates certain features in a situation which are assumed to constitute the relevant conditions for the occurrence of the phenomena under study. He repeatedly varies some features while keeps the other constant and then studies the effects of each change upon the phenomena. He also tries to find out relation of dependents and the variables. For example not giving a break of ten minutes or so between starting work and lunch work and again between lunch ~~work~~ hour and closing hour to workers is supposed to be very hazardous. Will the break remove their physical discomfort and effect on eyes? The experimenter studies the effect through comparison with experiment and without experiment. When the two groups of workers (getting tea-break and not getting tea-break) with identical job functions are compared, they exhibit differences in the perception of physical discomfort that lingered after work. This shows by manipulating the independent variable (tea-break), changes in the dependent variable (increase in production) are measured.

Thus the design in the experimental research thus consists of two types of groups (i) 'control group' which is not exposed to experimental variable (ii) 'experimental group', which is exposed to experimental variable.

The merit of experimental research design is that it helps to rule out various factors as irrelevant so that the research problem is simplified.

However, both the groups (control & experimental groups) should be similar in many characteristics regarding their background, so that changes due to the experimental variable will be more manifest and the researchers inferences could be firm.

Thus from the above discussion it is clear that a research design is the most systematic plan utilized for research related issues in social sciences. Research design is the basis of the whole study. It is the logical and systematic planning and directing of a piece of research. If it is not properly formulated while study will almost collapse and the very purpose of conducting the study will be defeated.

Function / Importance / Significance of Research Design. (4)

The major functions of research design are:

1. Research designs provide a blueprint for studying social questions. They describe the target population, sampling method, size of the sample, data collection procedure, data analysing procedure etc.
2. Research design dictate boundaries of research activity and enable the investigator to channel his energies in a specific direction.
3. Research design enables the investigator to anticipate potential problems in the implementation of the study. For example criticism of the topic can be reviewed for betterment.
4. Optimum reliability is achieved. along with the fact that designing helps in giving useful conclusions in the form of hypothesis or theories.