

## Types of Research Methodology

Research methodology is a system of methods, used scientifically for solving the research problem. The procedures enhance the research process and it exposes the way research is carried out. The basic types of research are as follows:

1. **Descriptive Research:** It include surveys and fact finding enquiries of different kinds. The main purpose of descriptive research is description of the state of affairs as it exists at present. In social science and business research the term *Ex Post Facto Research* is often used for *Descriptive Research*. The main characteristic of this method is that the researcher has no control over the variables. The researcher can only report what has happened or what is happening.
2. **Analytical Research:** In this research, the researcher has to use facts or information already available and analyse these to make a critical evaluation of the material.
3. **Applied Research:** It aims at finding a solution for an immediate problem facing a society or an industrial/ business organisation. The central aim of applied research is to discover a solution for some pressing practical problems. For example research aimed at certain conclusions facing a concrete social or business problem.
4. **Fundamental Research:** It is mainly concerned with generalisations and formulation of a theory. Gathering knowledge or knowledge's sake is termed fundamental research. For example research concerning a natural phenomenon or research concerning human behaviour with a view to make generalisations about human behaviour.
5. **Quantitative Research:** It is based on quantitative measurements of some characteristics. It is applicable to phenomenon that can be expressed in terms of quantities.
6. **Qualitative Research:** It is concerned with qualitative phenomenon i.e. phenomenon relating to or involving quality or kind. It aims at discovering the underlying motives and desires of human behaviour. It is to analyse the various factors which motivate people to behave in a particular manner or which make people like or dislike a particular thing.
7. **Conceptual Research:** It is related to some abstract ideas or theories. It is used by philosophers and thinkers to develop new concepts or to reinterpret existing ones.
8. **Empirical Research:** It relies on experience or observation alone. It is data based research coming up with conclusions which are being verified by observation or experiment. The researcher provides himself with a working hypothesis or guess as to the probable result. The researcher then work to gather enough data to prove or disprove his hypothesis.
9. **Explanatory research:** It is a research method that explores why something occurs when limited information is available. It can help you increase your understanding of a given topic, ascertain how or why a particular phenomenon is occurring, and predict future occurrences. Explanatory research can also be explained as a "cause and effect" model, investigating patterns and trends in existing data that haven't been previously investigated. For this reason, it is often considered a type of causal research. Explanatory research is used to investigate how or why a phenomenon takes place. Therefore, this type of research is often one of the first stages in the research process, serving as a jumping-off point for future research. Explanatory research helps you analyse these patterns, formulating hypotheses that can guide future endeavours.
10. **Other types of research:** All other types are variations of one or more of the above types of approaches, based on either the purpose of research or the time required to accomplish the research, or on the environment in which research is done etc. Such as one time research in which research is confined to a single time period or longitudinal research where research is carried on over several time periods. Research may be clinical or diagnostic, exploratory, formalized, historical, field setting, laboratory or simulation research.

**Table 2.1** Classification of Research

S. No.	Basis of classification	Types
1.	Objectives	1. Descriptive 2. Correlational 3. Explanatory 4. Exploratory 5. Experimental
2.	Outcome	1. Fundamental 2. Applied
3.	Logic	1. Deductive 2. Inductive
4.	Process	1. Quantitative 2. Qualitative
5.	Inquiry mode	1. Structured 2. Unstructured
6.	Idea or concept	1. Conceptual 2. Empirical