

# Concept and Types of Research

## DEFINITION OF RESEARCH

When you say that you are undertaking a research study to find answers to a question, you are implying that the process;

1. is being undertaken within a framework of a set of **philosophies** (approaches);
2. uses procedures, methods, and techniques that have been tested for their **validity** and **reliability**;
3. is designed to be **unbiased and objective**.

**Philosophies** mean approaches e.g. qualitative, quantitative and the academic discipline in which you have been trained.

**Validity** means that the correct procedures have been applied to find answers to a question.

**Reliability** refers to the quality of a measurement procedure that provides repeatability and accuracy.

**Unbiased and objective** means that you have taken each step in an unbiased manner and drawn each conclusion to the best of your ability and without introducing your own vested interest.

*(Bias is a deliberate attempt to either conceal or highlight something).*

**Adherence to the three criteria mentioned above enables the process to be called 'research'.**

However, the degree to which these criteria are expected to be fulfilled varies from discipline to discipline and so the meaning of 'research' differs from one academic discipline to another.

The difference between research and non-research activity is, in the way we find answers: the process must meet certain requirements to be called research.

We can identify these requirements by examining some definitions of research.

The word research is composed of two syllables, **re** and **search**. "**re**" is a prefix meaning again, a new or over again and "**search**" is a verb meaning to examine closely and carefully, to test and try, or to probe. Together they form a noun **describing a careful, systematic, patient study and investigation in some field of knowledge, undertaken to establish facts or principles.**

Research is a *structured inquiry that utilizes acceptable scientific methodology to solve problems and create new knowledge that is generally applicable.*

Scientific methods consist of systematic observation, classification, and interpretation of data.

## CHARACTERISTICS OF RESEARCH:

Research is a process of collecting, analyzing and interpreting information to answer questions.

But to qualify as research, the process must have certain characteristics: it must, as far as possible, be controlled, rigorous, systematic, valid and verifiable, empirical and critical.

**Controlled**— in real life there are many factors that affect an outcome. The concept of control implies that, in exploring causality in relation to two variables (factors), you set up your study in a way that minimizes the effects of other factors affecting the relationship. This can be achieved to a large extent in the physical sciences (cookery, bakery), as most of the research is done in a laboratory. However, in the social sciences (Hospitality and Tourism) it is extremely difficult as research is carried out on issues related to human beings living in society, where such controls are not possible. Therefore in Hospitality and Tourism, as you cannot control external factors, you attempt to quantify their impact.

**Rigorous**-you must be scrupulous in ensuring that the procedures followed to find answers to questions are **relevant, appropriate and justified**. Again, the degree of rigor varies markedly between the physical and social sciences and within the social sciences.

**Systematic**-this implies that the procedure adopted to undertake an investigation follow a certain logical sequence. The different steps cannot be taken in a haphazard way. Some procedures must follow others.

**Valid and verifiable**-this concept implies that whatever you conclude on the basis of your findings is correct and can be verified by you and others.

**Empirical**-this means that any conclusion drawn are based upon hard evidence gathered from information collected from real life experiences or observations.

**Critical**-critical scrutiny of the procedures used and the methods employed is crucial to a research enquiry. The process of investigation must be foolproof and free from drawbacks. The process adopted and the procedures used must be able to withstand critical scrutiny.

*For a process to be called research, it is imperative that it has the above characteristics.*

## TYPES OF RESEARCH

Research can be classified from three perspectives:

1. *Application* of research study
2. *Objectives in undertaking* the research
3. *Inquiry Mode* employed

### 1. Application:

From the point of view of application, there are two broad categories of research:

1. Pure research and
2. Applied research.

1. **Pure research** involves developing and testing theories and hypotheses that are intellectually challenging to the researcher but may or may not have practical application at the present time or in the future. **The knowledge produced through pure research is sought in order to add to the existing body of research methods.**

2. **Applied research** is done to solve specific, practical questions; for policy formulation, administration and understanding of a phenomenon. It can be **exploratory**, but is usually **descriptive**. It is almost always done on the basis of basic research.

Applied research can be carried out by academic or industrial institutions. Often, an academic institution such as a university will have a specific applied research program funded by an industrial partner interested in that program.

## 2. Objectives:

From the viewpoint of objectives, a research can be classified as

1. *Descriptive*
2. *Correlational*
3. *Explanatory*
4. *Exploratory*

1. **Descriptive research** attempts to describe systematically a situation, problem, phenomenon, service or programme, or provides information about, say, living condition of a community, or describes attitudes towards an issue.

2. **Correlational research** attempts to discover or establish the existence of a relationship/interdependence between two or more aspects of a situation.

3. **Explanatory research** attempts to clarify why and how there is a relationship between two or more aspects of a situation or phenomenon.

4. **Exploratory research** is undertaken to explore an area where little is known or to investigate the possibilities of undertaking a particular research study (**feasibility study pilot study**).

*In practice, most studies are a combination of the first three categories.*

## 3. Inquiry Mode:

From the process adopted to find the answer to research questions – the two approaches are:

1. *Structured approach*
2. *Unstructured approach*

### 1. Structured approach:

The structured approach to inquiry is usually classified as **quantitative research**. Everything that forms the research process- objectives, design, sample, and the questions that you plan to ask of respondents- is predetermined. It is more appropriate to determine the extent of a problem, issue or phenomenon by quantifying the variation.

e.g. how many people have a particular problem? How many people hold a particular attitude?

## **2. Unstructured approach:**

The unstructured approach to inquiry is usually classified as **qualitative research**. This approach allows flexibility in all aspects of the research process.

It is more appropriate to explore the nature of a problem, issue or phenomenon **without quantifying it**. Main objective is to describe the variation in a phenomenon, situation or attitude.

e.g, description of an observed situation, the historical enumeration of events, an account of different opinions different people have about an issue, description of working condition in a particular industry.

*Both approaches have their place in research. Both have their strengths and weaknesses.*

In many studies, there is a combination of both qualitative and quantitative approaches.

For example, suppose you have to find the types of cuisine/accommodation available in a city and the extent of their popularity.

**Types of cuisine** is the qualitative aspect of the study as finding out about them entails description of the culture and cuisine

The **extent of their popularity** is the quantitative aspect as it involves estimating the number of people who visit a restaurant serving such cuisine and calculating the other indicators that reflect the extent of popularity.