PRIYAM

RESEARCH

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Learning Objectives

- Concept of Research
- Scope of Research
- Significance of Research
- Types of Research
- Research Process
- Research Design
- Formulation of Research Problem
- Research Variables

Concept of Research

- Research refers to a search for knowledge.
- Research as a scientific and systematic search for pertinent information on a specific topic.
- Research as "a careful investigation or inquiry especially through search for new facts in any branch of knowledge".

Definition of Research

- Research is a systematic, organized, and objective process of finding answers to questions or solving problems through the collection, analysis, and interpretation of data.

According to Clifford Woody

- Research comprises defining and redefining problems, formulating hypothesis or suggested solutions; collecting, organizing and evaluating data; making deductions and researching conclusion; and at last carefully testing the conclusions to determine whether they fit the formulating hypothesis.

PRAXIS

According to D. Slesinger and M. Stephenson

- The manipulation of things, concepts or symbols for the purpose of generalizing to extend, correct or verify knowledge, whether that knowledge aids in construction of theory or in the practice of an art.

Nature Of Research

- Research is not just about gathering information — it is a systematic, purposeful, and scientific process aimed at generating new knowledge or solving problems.
- Just collecting facts or information with no clear purpose.
- Researching and recording facts or information without interpretation.

Characteristics of Research

- Data are collected systematically.
- Data are interrelated systematically.
- There is a clear purpose: to find things out.
- Accurately measures or investigates what it is intended to.

Purpose of Research

- **Exploratory** → To investigate a new problem or topic.
- **Descriptive** → To describe characteristics of a phenomenon.
- **Explanatory** → To explain relationships between variables.
- **Applied** → To solve practical problems.
- **Basic (or Fundamental)** → To expand general knowledge.

Objective of Research

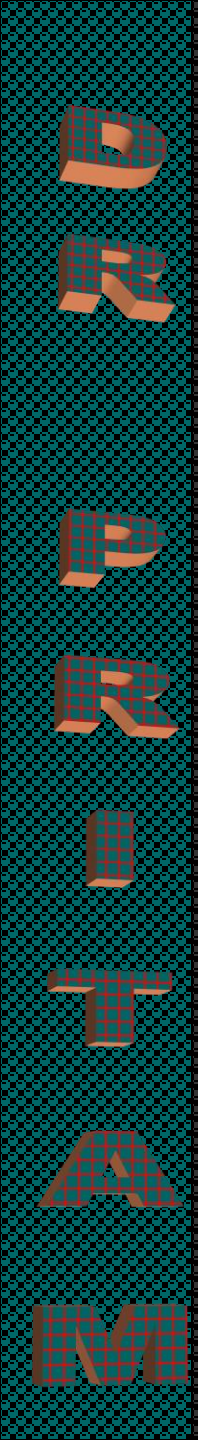
- To gain familiarity with a phenomenon or to achieve new insights into it. [Formulative]
- To portray accurately the characteristics of a particular and individual situation. [Descriptive]
- To determine the frequently with which something occurs or with which it is associated with something else. [Diagnostic]
- To test a hypothesis of a casual relationship between variables. [Hypothesis–Testing]

Motivation in Research

- Desire to get a research degree along with its consequential benefits.
- Desire to face the challenge in solving the unsolved problems.
- Desire to get intellectual joy of doing some creative work.
- Desire to be of service to security.
- Desire to get respectability.

Functional areas of Research

- Marketing.
- Human Resource Management.
- Production.
- Finance and Accounting.
- Information Technology.
- Material planning and Production control.
- Purchasing function.
- Advertising and Sales Promotion Function.
- Social service, and more.



Basic Research

- Basic (Fundamental or Pure) research is a type of research conducted primarily to increase our understanding of fundamental principles, theories, and concepts, without immediate concern for practical applications. Its main goal is to expand knowledge rather than to solve a specific real-world problem right away.

Key Features

- Purpose – To gain deeper theoretical understanding.
- Nature – Exploratory, theoretical, and conceptual.
- Outcome – New principles, theories, or models.

Applied Research

- Applied research is research conducted to solve specific, practical problems by applying existing knowledge, theories, or methods. Its goal is to find immediate, real-world solutions rather than just expanding theoretical understanding.

Key Features

- Purpose – To address practical issues or improve processes.
- Nature – Problem-oriented and action-focused.
- Outcome – Direct applications, products, policies, or interventions.

Scope of the Research

- **Subject Area:** Specifies the field or discipline (e.g., education, medicine, engineering) where the research is conducted.
- **Topic Coverage:** Determines the specific aspect, theme, or problem within the chosen subject area that will be studied.
- **Objectives and Questions:** Outlines what the study aims to achieve and the questions it seeks to answer.
- **Population and Sample:** Defines the group of people, objects, or cases being studied, and the subset chosen for data collection.
- **Geographical Coverage:** Specifies the location(s) or region(s) where the study is carried out.
- **Time Frame:** Indicates the period covered by the research, such as past data, present trends, or future projections.
- **Limitations:** Acknowledges factors like time, resources, or accessibility that may restrict the study's breadth.

Significance of Research

- Research inculcates scientific and inductive thinking, and it promotes the development of logical habits of thinking and organization.
- The role of research in several fields of applied economics, whether related to business or to the economy as a whole, has greatly increased in modern times.
- Research provides the basis for nearly all government policies in our economic system.

Significance of Research

- Research has its special significance in solving various operational and planning problems of business and industry.
- Research is equally important for social scientists in studying social relationships and in seeking answers to various social problems.

Research Methods Vs Research Methodology

- Research Methods are the methods or techniques employed by researchers in conducting research operations. Research Methods can be put into the following three groups.
  - Collection of data.
  - For establishing relationships between the data and the unknowns by using statistical techniques.
  - Evaluate the accuracy of the results.
- Research Methodology is a scientific and systematic way to solve research problems. A researcher has to design his methodology. The methodology may differ from problem to problem. Thus, the scope of research methodology is wider than research methods.

Scientific Method

- Scientific method is the pursuit of truth as determined by logical considerations.
- Scientific method attempts to achieve "this ideal by experimentation, observations, logical arguments from accepted postulates and a combination of these three in varying proportions".
- All this is done through experimentation and survey investigations which constitute the integral part of scientific method.

Scientific Method

The scientific method is based on certain basic postulates:

- It relies on empirical evidence.
- It utilizes relevant concepts.
- It is committed to only objective considerations.
- It presupposes ethical neutrality.
- It results into probabilistic predictions.
- Its methodology is made known to all concerned for critical scrutiny is for use in testing the conclusions through replication.
- It aims at formulating most general axioms or what can be termed as scientific method.

Characteristics of Scientific Methods

- **Objectivity: -** The Scientific method should enable us to classify facts accurately and carefully, without any bias.

- **Accuracy of Measurement: -** A mere collection and classification of the facts may not be sufficient; one must be able to make observations of their correlation and sequence.

Characteristics of Scientific Methods

- **Self Criticism:-** Scientist should critically examine their own research as they are a group of people who are never sure that they have can found the ultimate truth, thus their studies are continuing and exhaustive. If researchers are completely objective, their measurements are accurate and their studies are exhaustive, then their result will be valid and reliable.

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