

Research Methodology in Social Sciences

by

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What is Research?

Re ----- *Search*

Re ***means*** (once more, afresh, anew) **or**
(back; with return to a previous state)

Search ***means*** (look through or go over
thoroughly to look something) **OR** (examine to find
anything concealed)

Why do Research?

- Search for an **answer to a question /solution to a problem**
- to extend knowledge, unravel mysteries, build theories
- To verify & test facts, predict events & derive causal explanations
- To solve problems & achieve national development
- Based on scientific method

Research is

*Research is an Organized and
Systematic way of Finding Answer
to Questions*

Systematic

because there is a definite set of procedures and steps which you will follow.

There are certain things in the research process which are always done in order to get the most accurate results.

Organized

in that there is a structure or method in going about doing research.

It is a planned procedure, not a spontaneous one. It is focused and limited to a specific scope.

Finding Answer

is the end of all research. Whether it is the answer to a hypothesis or even a simple question, research is successful when we find answers.

Sometimes the answer is no, but it is still an answer.

Questions

are central to research. If there is no question, then the answer is of no use.

Research is focused on relevant, useful, and important questions. Without a question, research has no focus, drive, or purpose.

Social Science

social sciences revolve around the behaviour of humans as a people or human societies, its production, and operations.

This type of science is also very concerned with cultural and human contexts and tries to explain how the world works.

Its main aim is to study the complex and changing phenomena that occur in human and social life and their interactions with one another.

Approaches in Social Research

Positivism : An epistemological doctrine that the true knowledge is only about the fact. The fact or the factual is an object that can be observed empirically with our senses (by testing hypothesis as in science)

Intpretivism : to build an understanding of the motives and intentions that underpin social behaviour

Critical Social Research : to ask critical questions with a view to changing society or to transform unequal power relationship

Positivism

a philosophy developed in Europe

An epistemological doctrine that the true knowledge is only about the fact.

The fact or the factual is an object that can be observed empirically with our senses.

The term 'positive' doesn't mean normatively, but descriptively. It means 'the factual'.

Neo Positivism

A movement in early twentieth-century

American sociology which blended together the three themes of

quantification, [behaviourism](#), and [positivist](#) epistemology.

Types of Research

1. Quantitative Research
2. Basic Research
3. Applied Research
4. Longitudinal Research
5. Qualitative Research
6. Descriptive Research
7. Classification Research
8. Comparative Research
9. Explorative Research
10. Explanatory Research
11. Causal Research
12. Theory-testing Research
13. Theory-Building Research
14. Action Research

1). Quantitative Research

It is based on methodological principals of positivism and neo-positivism

It adheres to standards of strict research design.

Statistical analysis is used in it.

2). Basic Research

Purpose of gaining knowledge

It advanced understanding about social world

Help in supporting & rejecting existing hypothesis & theories

3). Applied Research

Aims at solving specific problems

Aims at establishing policy programs that will help to improve social life

Types of applied research are action research, social impact studies, cost-benefit analysis, evaluation research

4). Longitudinal Research

It involves study of sample at more than one point in time or occasion

e.g. Trend studies, Panel studies

Vs Cross sectional Research

It involves study of many cases at one point in time or occasion

5). Qualitative Research

It is based on methodological principals of phenomenology, symbolic interactionism, hermeneutics.

It aims at exploration of social world.

Lazarsfeld (American Sociolog): following elements are there....exploration, relationship discovery, establishing construct, testing hypothesis.

6). Descriptive Research

Usually it forms preliminary study of a research project.

It aims at describe social events, relations and events.

It provides background information about an event in question.

7). Classification research

It aims at categorization of units into groups

To demonstrate differences

To explain relationships

8). Comparative Research

To identify similarities and differences between units at all levels.

9). Exploratory Research

It aims at gaining information about an issue in hand.

10). Explanatory Research

It aims at explaining social relations and events.

To build, test or revise a theory.

11). Causal Research

It aims at establishing cause and effect relationship among variables.

12). Theory testing Research

It aims at testing validity of a theory

13). Theory building Research

To establish and formulate theory

14). Action Research

It is application of fact findings to practical problem solving in a social situation with a view to improve quality of action within it, involving collaboration and cooperation of researchers, practitioners and laymen.

It can be situational (diagnose a problem and attempts to solve it), collaborative, participatory (researcher take part in implementation of findings) and self-evaluation (it involves constant evaluation and adjustment of research and practice)

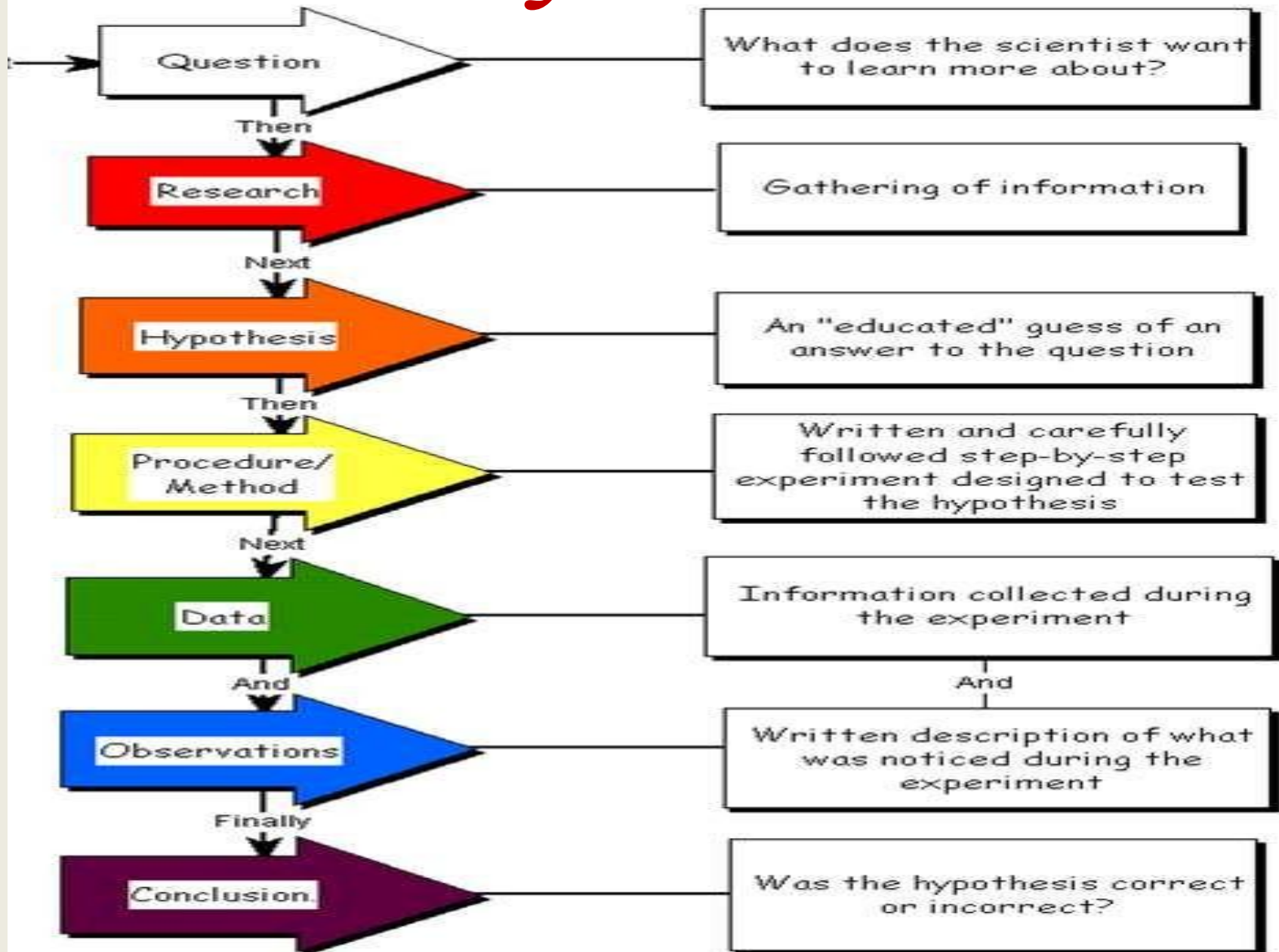
Scientific Attitude

- Consistent thinking
- Objective, dispassionate & unbiased
- Avoid personal preconceptions
- Ardent curiosity
- Ability to rise from failure, patience and self control
- Keeping open mind

Scientific Methods

- Systematic step by step procedure to seek facts or theories
- Relies on **evidence**
- Use **concepts**
- Keeps **objectivity**
- Follows ethical **neutrality**
- Formulate **generalization**
- Ensures **verifiability**
- uses **logical reasoning**

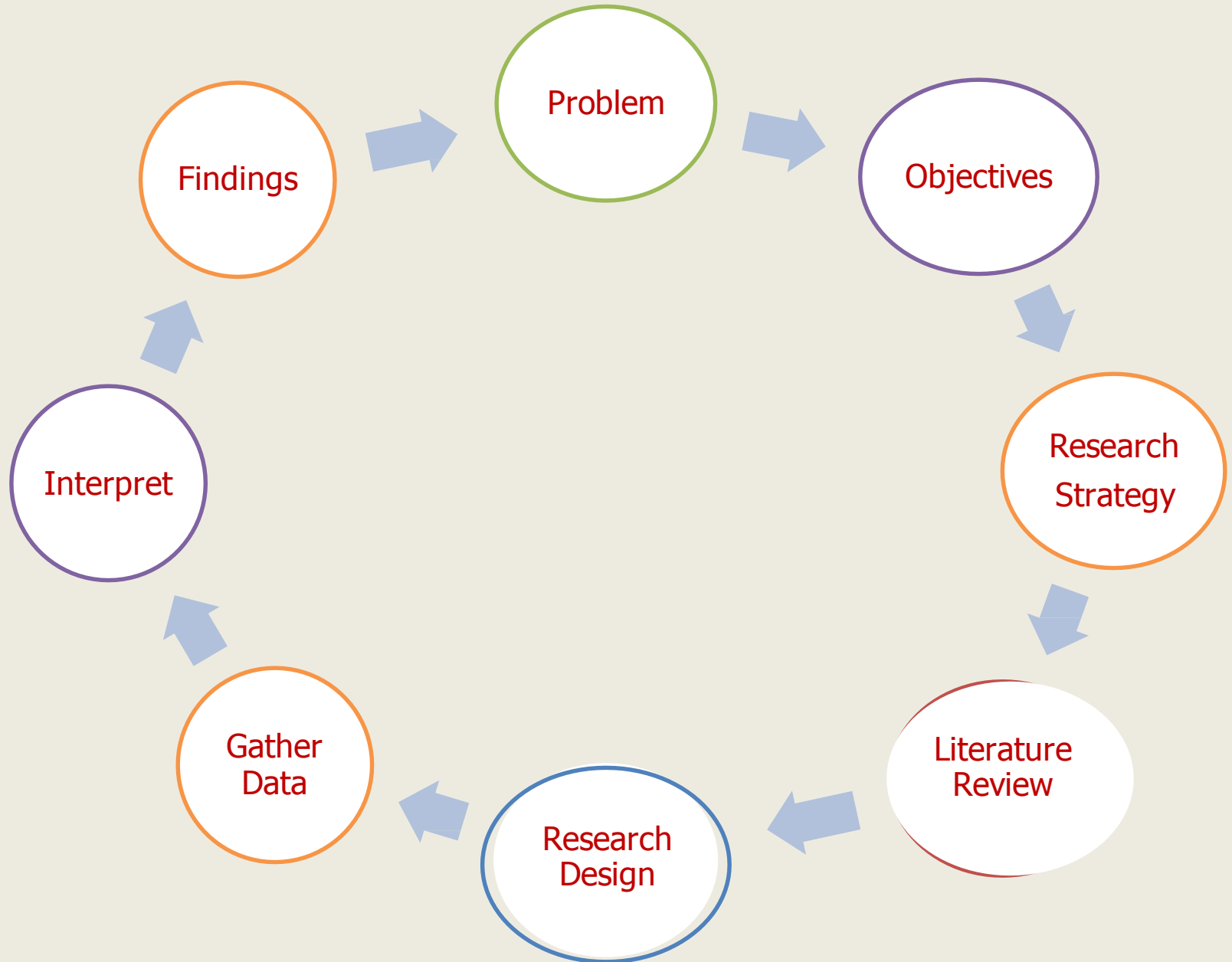
Scientific Methods



Steps in Scientific Methods

- Systematic **step by step procedure** –
- Observation,
- Hypothesis,
- Definition,
- Gathering of data,
- Analysis of data,
- Conclusion

Research Cycle



Problem

Gap phenomenon: Everyday life

Deviation between experience and reality

Deviations between plans and reality

A complaint

Competition

Research Gap : From Books or previous research

Differences in research results
(explain why they are different?)

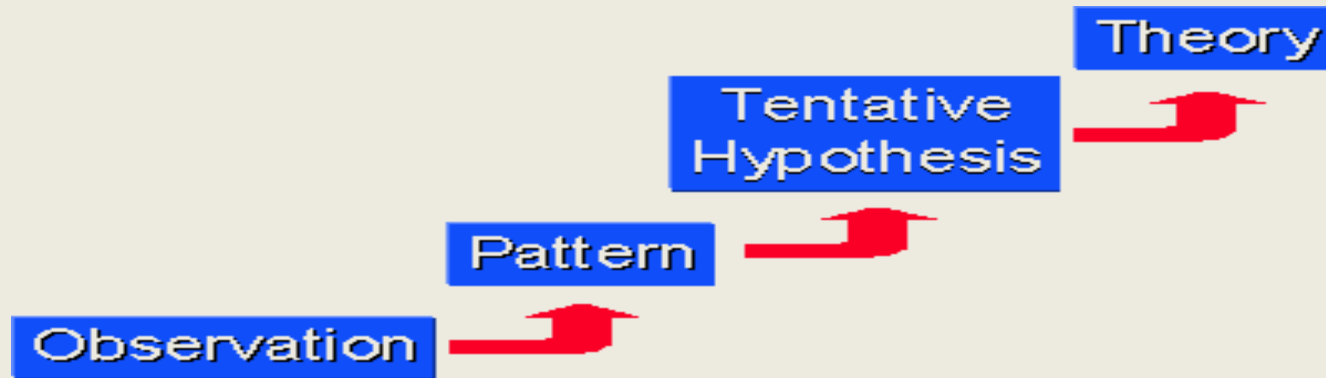
The existence of unclear relationship
concepts (explain the flow of relationship
logic?)

Limitations to previous research
(developing previous research)

Hypothesis

- A **tentative proposition** as to possible answers to a question
- Guides the direction, suggests type of research
- **Descriptive hypothesis** - Public enterprises are amenable for centralized planning
- **Rational hypothesis** – Higher income families spent more on recreation
- **Null hypothesis** – denying what are indicated
- **Statistical hypothesis**– Group A is older than group B

Inductive Reasoning



- Studying several individual cases and drawing a generalization
- Used when facts are studied, truths are un-covered
- Induction involves observation and generalization
- Eg a few experimental farms are studied and conclusion arrived

Deductive Reasoning



- Applying a **general principle to a specific** case
 - All apples are fruits (Major premises)
 - All fruits grow on trees (Minor premise)
 - Therefore all apples grow on trees(conclusion)
- **False premise can lead to fake results**
 - All sincere employees are sincere
 - Mohan is a regular employee
 - Hence Mohan is sincere
- Establishes a logical relationship

What a Research Design is

- Research Design is the *structure* of research
- a "glue" that holds all the elements in a research project together
- A systematic plan/outline/blue print
- A *series of guideposts* to show direction
- Without a plan research work will be unfocused, aimless & wandering
- Research plan describes boundaries, help perceive problems

Research Design : Content

- **Introduction** : Historic perspective of the problem, the need for study& research interest in the study
- **Statement of the problem** : Define research problem, point out its core nature & its importance
- **Review of literature**: Describe earlier studies, point out the gaps& justify how the present study fill the gap
- **Scope of the study** : The breadth, depth & area of the study. Demarcation of scope is to ensure manageability of study

Research Design : Content

- **Objective of the study** : These are the questions to which answers are sought. Limit to a reasonable number. Be precise.
- **Conceptual model** : The logical connection of variable, the assumption and propositions used to develop the framework are explained here
- **Hypothesis** : Refers to the anticipated outcome or possible solutions to the research questions
- **Definition of Concepts** : Define concepts used in the title, its objectives, hypothesis etc

Research Design : Content... Continued

- **Significance of study** : Relevance & significance of the study. Value of the findings for policy making, solution of problems and other practical applications
- **Area covered** : Territorial area to be covered
- **Period** :
- **Methodology used** Specify the type of design – experimental, descriptive, survey etc

Research Design : Content... Continued

- **Sampling** : Selection of sample for study
- **Tools for gathering data** : Tools such as interview, schedule, questionnaire etc used for data collection
- **Plan of analysis** : Specify statistical technique used
- **Chapter scheme** : Outline the chapter scheme
- **Time & financial budget**

Method of Collection of Data

- Data are facts or other materials for analysis/making testing of hypothesis possible
- **Observation** : Gathering data by viewing
- **Interviewing**: Involves face to face conversation
- **Mail Survey** : Getting Questionnaire completed
- **Experimentation** : Involves study of independent variables
- **Sociometry**: Graphic representation of social relationship
- **Simulation** : Involves creation of an artificial situation similar to the actual situation

Tools for Data Collection

- **Tool is an instrument used for research**
- **Schedule** for Interview
- **Observation schedule** : Form for recording observation
- **Interview guide** : Suggestive Reference
- **Check List** : A list pertinent to an object
- **Rating Scale** : Measuring attitude
- **Opinionnaire** : List of questions to an issue
- **Document schedule**
- **Schedule for Institutions** : Used for survey of organizations

Life Skills a Researcher Needs to Develop

- **Reading** : Books, news paper, magazines, manuals etc
- **Listening** : to friends, radio, television
- **Watching** : watch children, friends, social issues, tv
- **Choosing**: choose deliberately
- **Questioning**: Question the information we receive
- **Summarizing** : summarize information. Organize it
- **Writing**: to convey your mind to another mind

Ways of Reading : A Researcher Needs to Know

- **Skimming** – reading contents, headings, introduction & conclusion
- **Scanning**- rapid search for some information
- **Reading to understand** – detailed study of a chapter
- **Word by word reading** – reading every word carefully
- **Reading for pleasure** – reading to relax & enjoy

Thank You

