

Scientific research methodology

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Why we do research



Research definitions

"the action of seeking to discover something, to arrive at new knowledge. .

What is scientific research?



1. Definition of scientific research

Scientific research is defined as a dynamic process or systematic approach to acquiring knowledge, enabling us to examine phenomena and solve problems, and to obtain precise answers through investigation.

2. Stages of scientific research application:

1

The use of research

The research objective

2

3

Investigation methods

The use of research

Fundamental

applied

The research objective

1

**Exploratory
(What?)**

2

**Explanatory
(Why?)**

3

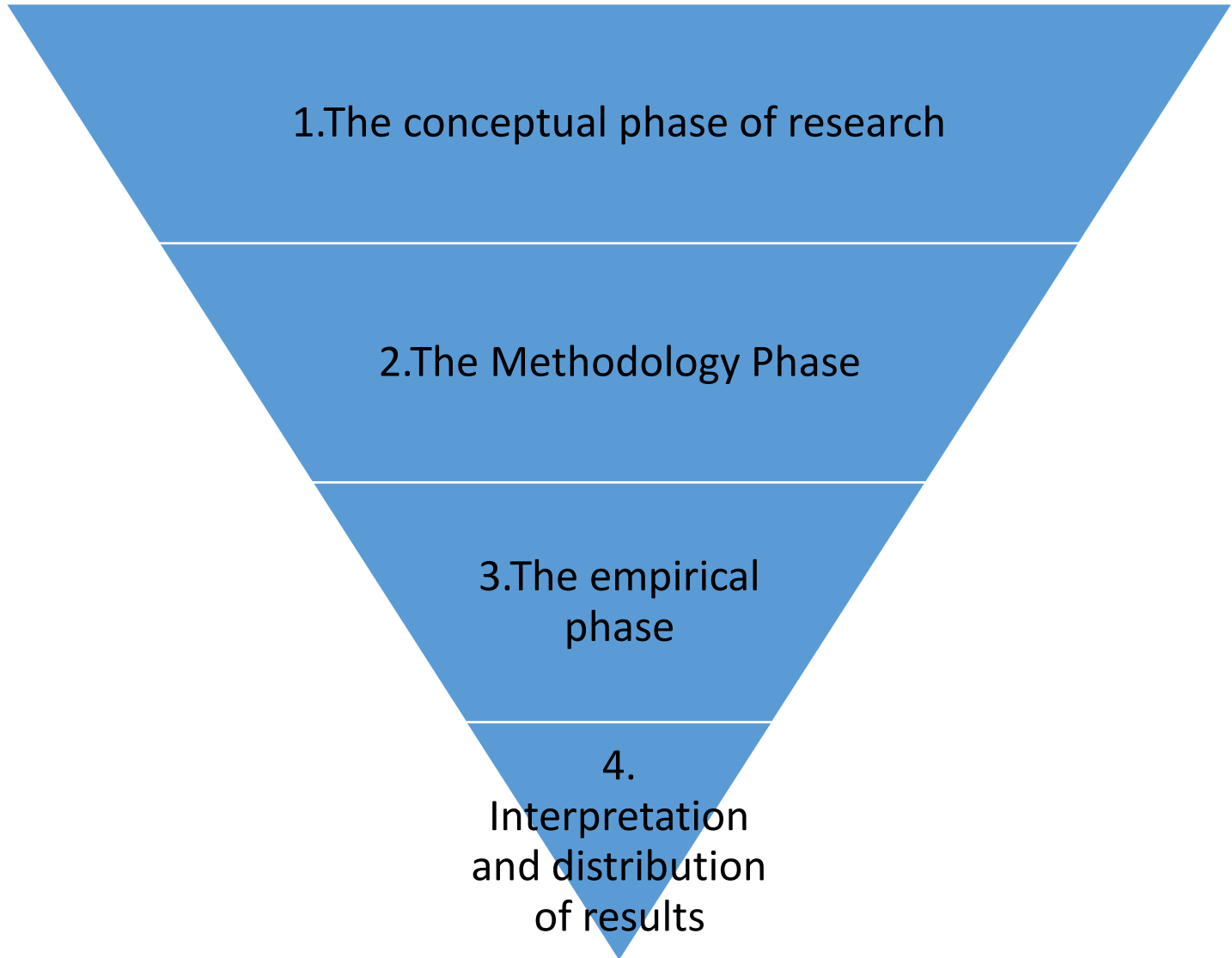
**Descriptive
(how? who?)**



3. Criteria for choosing the subject



4. research phases



5. The conceptual phase of research

The initial question

- Define a research topic:

what do you want to work on?

Bibliographic research

It is the set of methods, procedures and techniques intended to find the bibliographic references of a subject.

* Do not confuse bibliography, bibliographic reference, biography *.

Research hypothesis

- Research hypothesis is a plausible answer to the research problem.

2.The Methodology Phase

- 1. Choice of data collection methods and instruments**
- 2. Definition of study population and sample**
- 3. Describe the data collection process**
- 4. Presentation of the data analysis plan**
- 5. Data collection**

7.The empirical phase

- Collect field data
- Analyze field data

8. Interpretation and distribution of results

□ Interpretation The researcher :

- Summarizes research results
- Draws conclusions
- Makes recommendations

□ Dissemination:

- Final step in the process
- Dissemination of research results