

Introduction to Research Methodology



Motivation in research
Research Methodology



Research at a glance

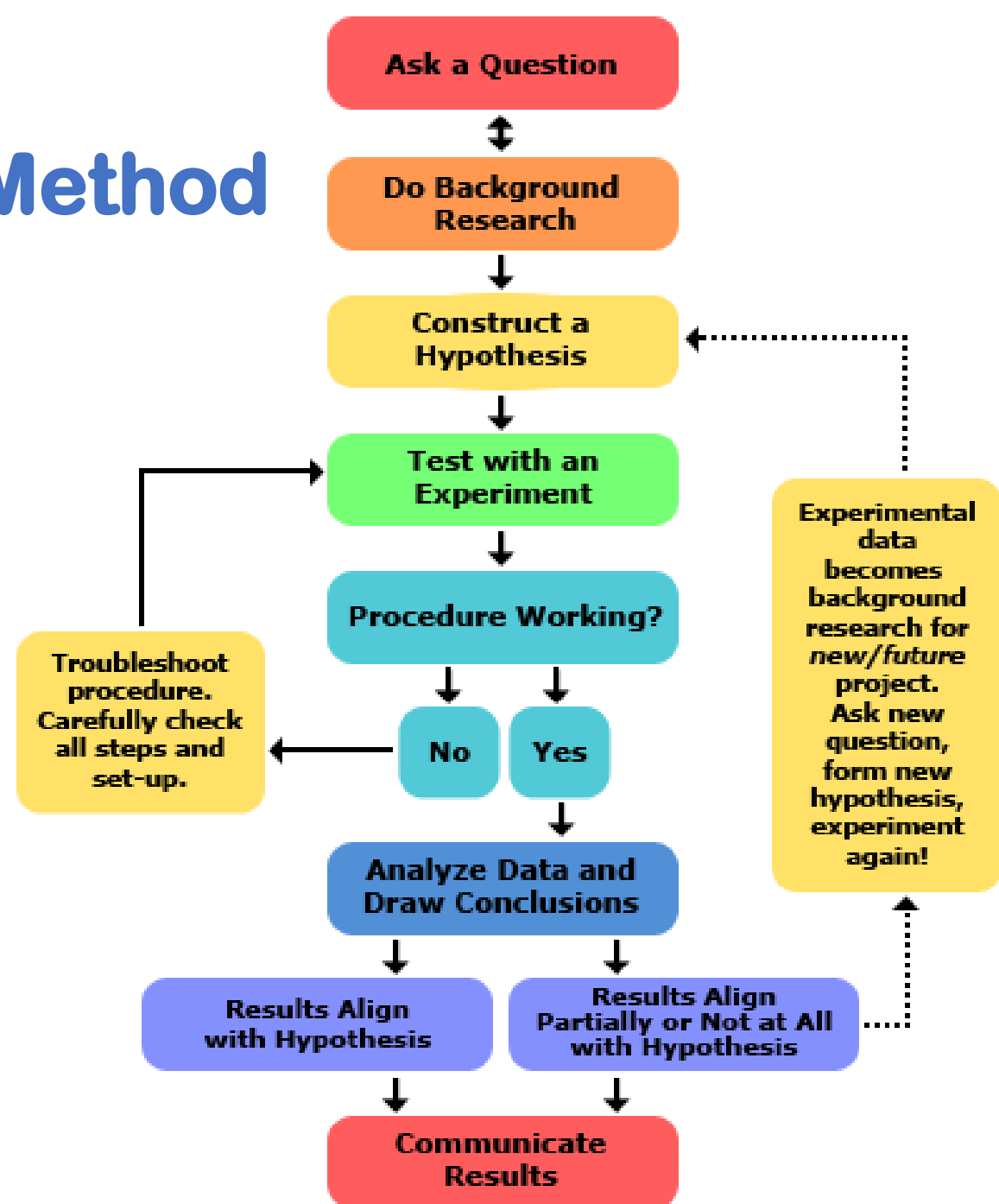
Three basic steps:

1. Pose a question
2. Collect data to answer the question
3. Present an answer to the question



Scientific Research Method

Observation



Steps In The Research Process



1-Identifying a Research Problem

- * Some issue or problem needs to be solved
- * You will state the problem in the introduction section of your paper and state the rationale for their importance.
- * Begin to start thinking about a problem now.





2- Literature Review

- * Who has studied the problem before?
What do they think?
- Review sources:
 - I. summaries,
 - II. Books
 - III. Journals, and indexed publications on a topic
- Review writing:
 - * Selectively choosing which literature to include in your review, and then summarizing the literature in a writing

3- Specifying a purpose for research

- * Identify the major purpose or objective for the study :
- * What do you intend to do with the findings ?



got purpose?

4- Collect the data

- * Identify and selecting individuals for study
- * Obtaining permission;
- * Gathering information by asking questions or observing behavior.



"After careful consideration of all 437 charts, graphs, and metrics, I've decided to throw up my hands, hit the liquor store, and get snocked. Who's with me?"

5- Analyzing and Interpreting data

- * Drawing conclusions:
- * Representing information in tables, figures, and pictures; and Explaining the findings.



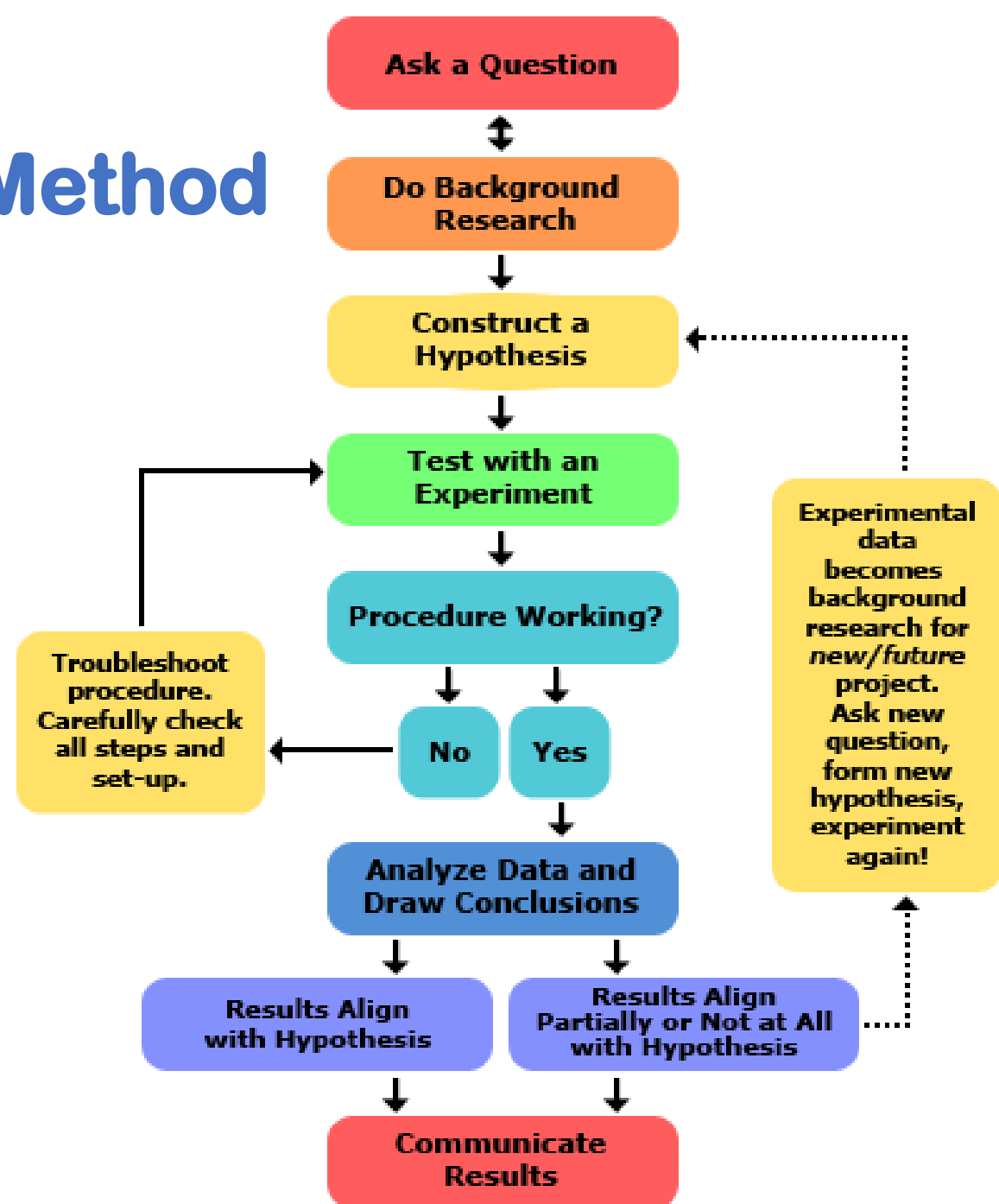
6-Reporting and Evaluating

- * Describe on the audience;
- * Structuring the report;
- * Presenting the report; and
Submitting to standards of evaluating.



Scientific Research Method

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Ethics

- * Honesty
- * Objectivity
- * Integrity
- * Carefulness
- * Respect for intellectual property
- * Confidentially
- * Respect for human subjects



Possibilities before Starting to Write

Journal paper: Presents final original results, careful description of technique etc.

Review paper: Summarizes, evaluates and collect results already published elsewhere.

Proceedings paper: Often preliminary results, usually short, (not as important as a journal paper).

Conference abstract: Short summary of results.

Proposal for funding: Strictly follow guidelines.

Thesis/Dissertation : Strictly follow specified format.

Book chapters: Different from the rest.