

Research Methodology

Lecture 1

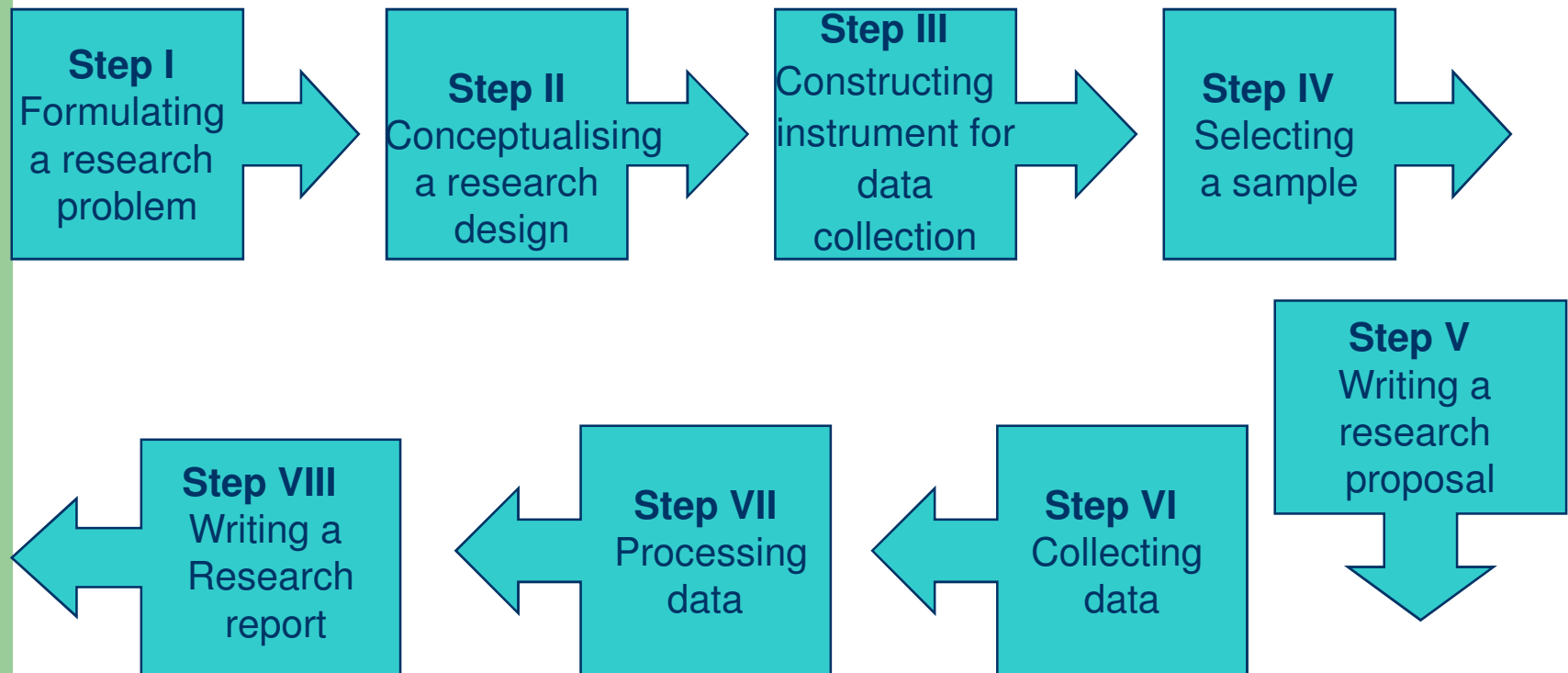
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Lecture outline

- Introduction to the course
 - Lectures
 - Reference
- The research process: an 8-step model
 - Step I Formulating a research problem

The research process: an 8-step model



Step I Formulating a research problem



- Reviewing the literature
- Defining a research problem
- Identifying variables
- Constructing hypotheses

1. Reviewing the Literature



Literature review

“ **Classification** and **evaluation** of what accredited scholars and researchers have written on a topic”

- If you do not have a specific research problem, start searching broad then narrow it down

Literature review is NOT a just a summary

- Organise information
- Synthesize results
- Identify controversy
- Develop questions

Reasons for reviewing the literature

- Bring clarity and focus to your research problem
- Improve your methodology
- Broaden your knowledge base in your research area

Procedures for reviewing the literature

- Search for existing literature
 - Tertiary literature
 - Secondary literature
 - Primary literature
- Review and criticise the literature selected
- Reviewing the literature is a continuous process

2. Defining a Research Problem



The research problem



“The question or assumption that you want to challenge or investigate”

Considerations in selecting a research problem

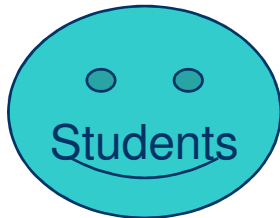
- Interest
- Magnitude
- Measurements of concepts
- Level of expertise
- Relevance
- Availability of data
- Ethical issues

3. Identifying Variables



A **Variable** is an entity that can take on different values

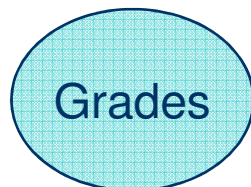
Effect of work experience on performance of Master degree students



Constant



Variable



Variable

4. Constructing Hypotheses



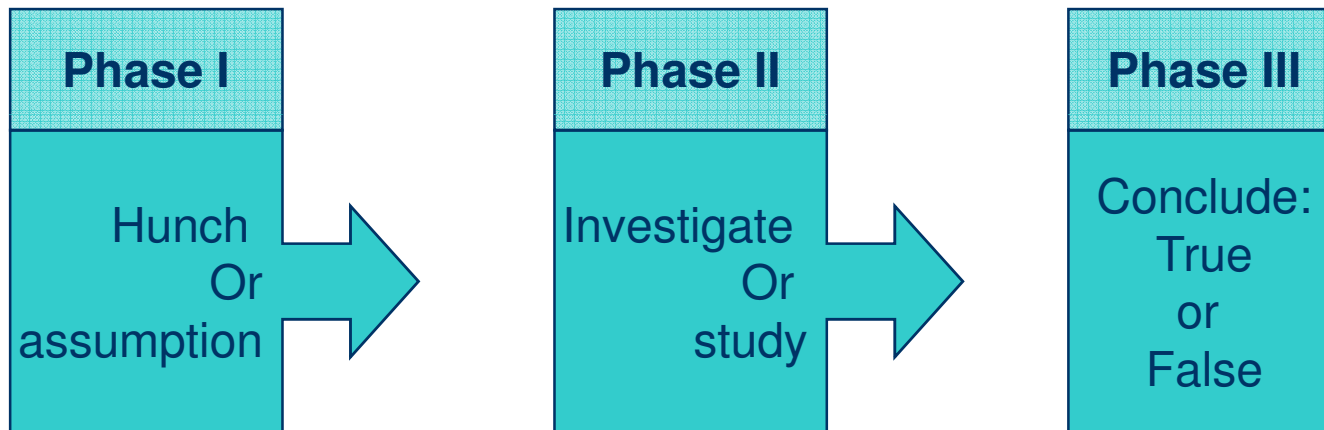
Hypothesis

‘Conjectural statement of the relationship between two or more variables’

Hypotheses are based on:

- Certain **assumptions** or **guesses**
(suspicion, hunch, relationship, idea about a phenomenon)
- Previous studies or observations

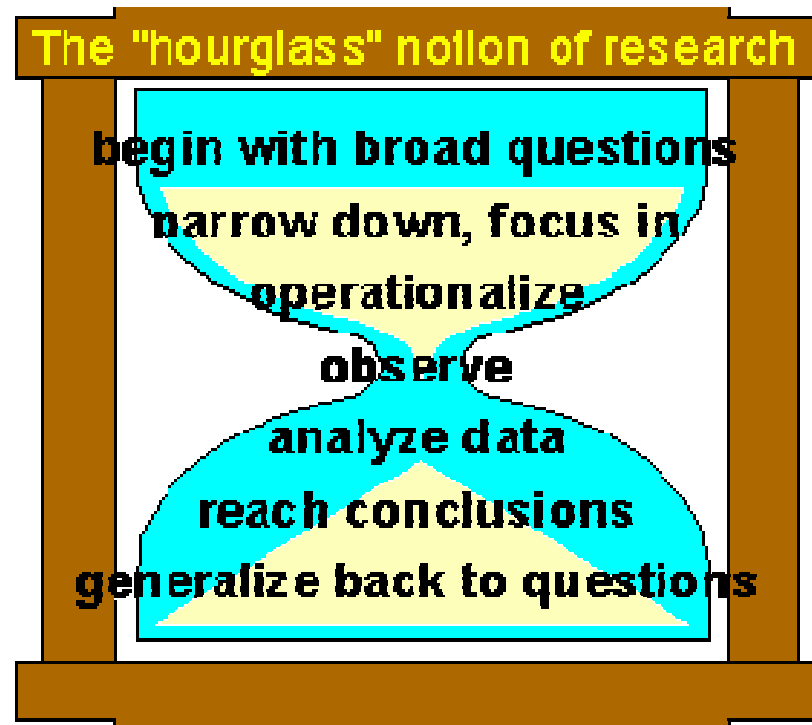
The Process of Testing a Hypothesis



The Functions of a Hypothesis

- Provides a study with a focus
 - Guides to specific aspects of a research problem to investigate
 - Guides to what type of data to collect
- Adds clarity and specificity to the research problem
- Establishes the basis for testing statistical significance

Zooming in on the problem



Summary

- The research process: an 8-step model
 - **Step I Formulating a research problem**
 - Reviewing the Literature
 - Formulating a Research Problem
 - Identifying variables
 - Constructing hypotheses