The Research Process: A Quick Glance

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Topics covered

The eight step model for carrying out research:

Phase I: DECIDING what to research

- Step I: Formulating a research problem

Phase II: PLANNING a research study

- Step II: Conceptualising a research design
- Step III: Constructing an instrument for data collection
- Step IV: Selecting a sample
- Step V: Writing a research proposal

Phase III: CONDUCTING a research study

- Step VI: Collecting data
- Step VII: Processing and displaying data
- Step VIII: Writing a research report

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Figure 2.1 The research journey

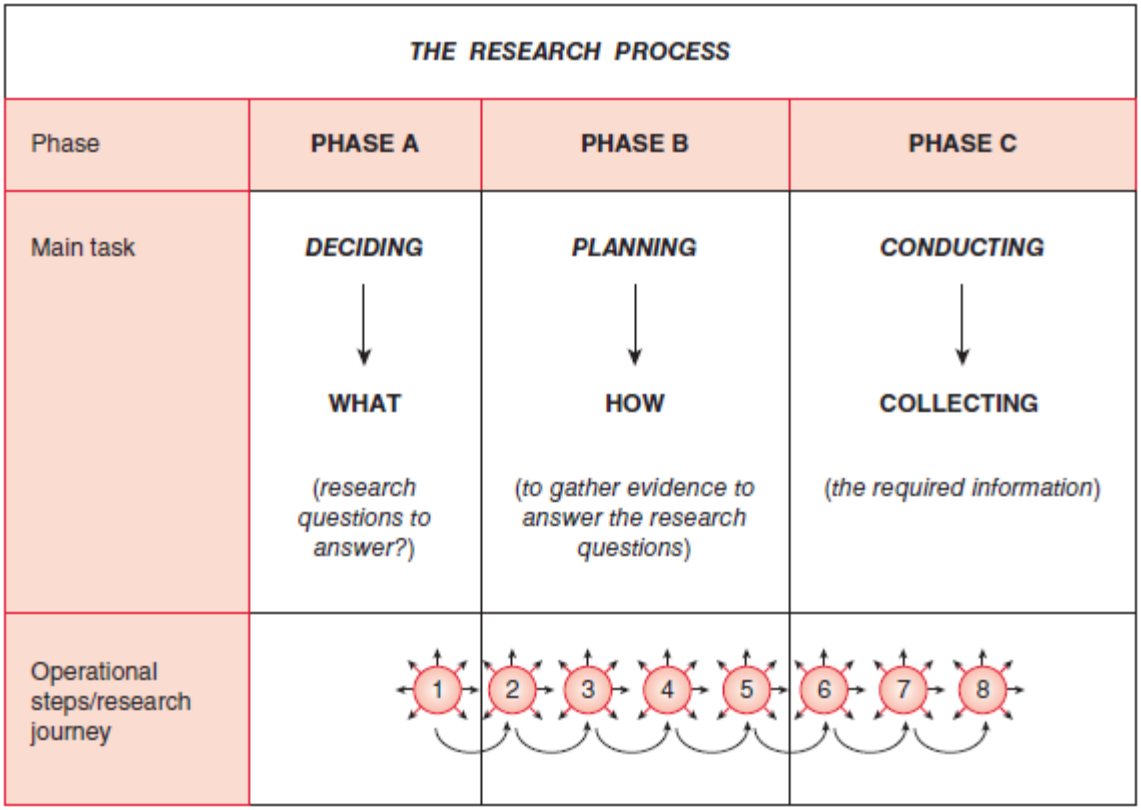

Figure 2.1 The research journey – touch each post and select methods and procedures appropriate for your journey

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Research Defined

Research is defined as the systematic and objective process of inquiry for aid in making decisions.

According to the American sociologist Earl Robert Babbie, “Research is a systematic inquiry to describe, explain, predict and control the observed phenomenon. Research involves inductive and deductive methods.”

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Research Types

Basic research

Applied research

Basic Research

- Attempts to expand the limits of knowledge.
- Not directly involved in the solution to a pragmatic problem.

Basic Research Example

- Is executive success correlated with high need for achievement?
- Are members of highly cohesive work groups more satisfied than members of less cohesive work groups?
- Do consumers experience cognitive dissonance in low-involvement situations?

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The research process

- Methodologies differ due to underpinning philosophy
- The process is the same for quantitative and qualitative research
- Each approach uses different research methods for data collection, data processing, analysis and style of communicating the findings

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Table 1.1 Differences between qualitative and quantitative research

Table 1.1 Types of research studies from the perspective of objectives

Examples	Aim	Main theme	Type of research
• Socioeconomic characteristics of residents of a community • Attitudes of students towards quality of teaching • Types of service provided by an agency • Needs of a community • Sale of a product • Attitudes of nurses towards death and dying • Attitudes of workers towards management • Number of people living in a community • Problems faced by new immigrants • Extent of occupational mobility among immigrants • Consumers' likes and dislikes with regard to a product • Effects of living in a house with domestic violence • Strategies put in place by a company to increase productivity of workers	To describe what is prevalent regarding: • a group of people • a community • a phenomenon • a situation • a programme • an outcome	To describe what is prevalent	**Descriptive research**
• Impact of a programme • Relationship between stressful living and incidence of heart attacks • Impact of technology on employment • Impact of maternal and child health services on infant mortality • Effectiveness of a marriage counselling service on extent of marital problems • Impact of an advertising campaign on sale of a product • Impact of incentives on productivity of workers • Effectiveness of an immunisation programme in controlling infectious disease	To establish or explore: • a relationship • an association • an interdependence	To ascertain if there is a relationship	**Correlational research**
• Why does stressful living result in heart attacks? • How does technology create unemployment/employment? • How do maternal and child health services affect infant mortality? • Why do some people have a positive attitude towards an issue while others do not? • Why does a particular intervention work for some people and not for others? • Why do some people use a product while others do not? • Why do some people migrate to another country while others do not? • Why do some people adopt a programme while others do not?	To explain: • why a relationship, association or interdependence exists • why a particular event occurs	To explain why the relationship is formed	**Explanatory research**

Figure 2.2 The research journey

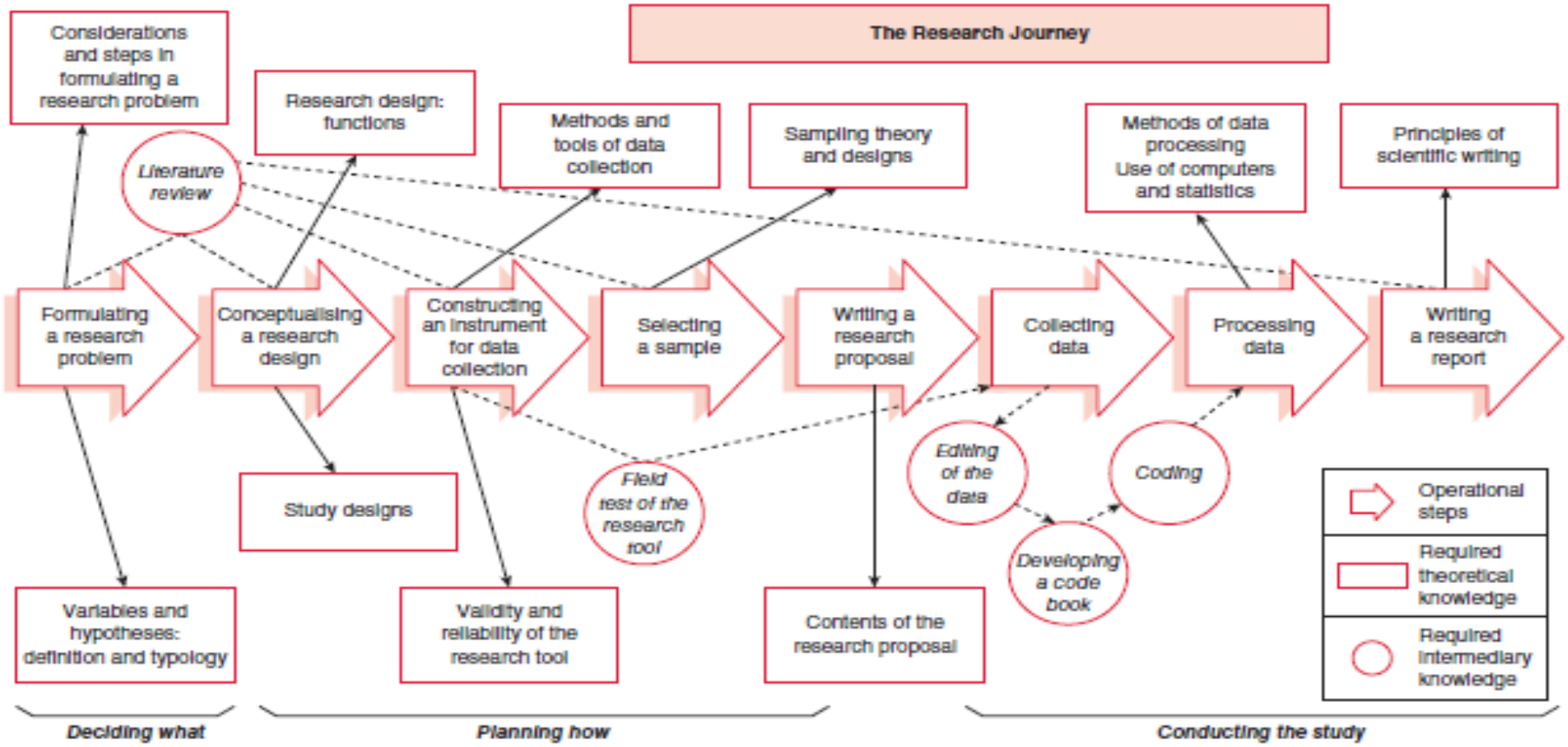

Figure 2.2 The research process

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Phase I: DECIDING what to do

Step I: Formulating a research problem

- Most important step, because the following steps are influenced by the research problem
- *What* do you want to find out *about*?
  - Have you got sufficient funds to do the research?
  - Have you got the time available to conduct the study?
  - Have you got knowledge of relevant disciplines?
  - Do you have sufficient knowledge of skills needed?

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Phase II: PLANNING a research study

Step II: Conceptualising a research design

What you find depends on *how* it was found

- Select an appropriate research design:
  - Quantitative
  - Qualitative
  - Mixed methods
- The design has to be
    - Valid
    - Workable
    - Manageable
- Be aware of its strengths and weaknesses

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Phase II: PLANNING - continued

Step III: Constructing an instrument for data collection

How will you collect your data?

- Construct a research instrument or research tool to collect data (interview schedules, questionnaires, notes on observations, diaries, interview guides, etc.)
- Or use secondary data (information already collected for other purposes)
- Do a pre-testing of your research tool (pilot study)

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Phase II: PLANNING – continued

Step IV: Selecting a sample

Who will take part in your research?

- Select appropriate sample/participants to represent the study population
- Avoid bias
- Random / probability samples
- Non-random / non probability samples
- Be aware of strengths and weaknesses of different sampling methods

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Phase II: PLANNING - continued

Step V: Writing a research proposal

Write a detailed plan about your research:

- *What* are you proposing to do?
- *How* you plan to proceed?
- *Why* you select the proposed strategy?

Phase III: CONDUCTING a research study

Step VI: Collecting data

Doing the data gathering using one or more data collection method, such as:

- conducting interviews
- mailing out questionnaires
- conducting nominal/focus groups discussions
- making an observation

Be aware of ethical issues!

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Phase III: CONDUCTING - continued

Step VII: Processing and displaying data

What did you find *how*?

- Analysing the data depends on the *type* of information and *how* to communicate the findings
- Distinguish between
  - Descriptive
  - Quantitative (statistical procedures)
  - Qualitative (narrative, content analysis)
  - Attitudinal

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Phase III: CONDUCTING - continued

Step VIII: Writing a research report

What have you done? *What conclusions* have you drawn from the findings?

- Different format for quantitative and qualitative research
- Structure using main themes of study
- Use academic conventions

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