



The research process:

The Research Process is a process of multiple scientific steps in conducting the research work. Each step is **interlinked with other steps**. The process starts with the **research problem at first**. Then it advances in the **following steps sequentially**. Generally, a researcher conducts **research work within eight steps**. In research work, primarily, you require a Research Proposal. It is because the proposal approves the research project whether you achieve the ability to conduct research or not. So when you write a research proposal, present the detailed plans and specific objectives of your study correctly.

Steps of the research process:

The research process consists of actions or steps necessary to effectively carry out research and the desired sequencing of these steps. It consists of the **eight-step model** for researching according to **three-phase**:

A. phase i: deciding what to research

step i formulating a research problem

B. phase ii: planning a research study

step ii conceptualizing a research design

step iii constructing an instrument for data collection

step iv selecting a sample

step v writing a research proposal

C. phase iii: conducting a research study

step vi collecting data

step vii processing and displaying data

step viii writing a research report

The pilot study:

What is a pilot study

It is a small-scale preliminary study conducted to evaluate feasibility, time, cost, adverse events, and effect size (statistical variability) to predict an appropriate sample size and improve upon the study design before performing a full-scale research project. General guidelines, for example, use 10% of the sample required for a complete study.

Reasons for conducting pilot studies:

- 1- eliminate some variables to reduce the time of the interview
- 2- select appropriate sample
- 3- model of interview
- 4- estimate the time needed
- 5- assessing whether the research protocol is realistic and workable
- 6- to find potential difficulties

Classification of research

1- Descriptive studies.

- A. Case reports and case series.
- B. Correlation studies.
- C. Cross-sectional studies.

2- Analytic studies:

- A. Observational studies:
 - i. Case-control study.
 - ii. Cohort study.
- B. Interventional (experimental) studies.

Introduction

The introduction is the first chapter of your thesis (dissertation) and appears right after the table of abbreviations. It's essential to draw the reader in with a strong beginning. Set the stage for your research with a clear focus, purpose, and direction.

It is the primary paragraph in the scientific paper (thesis) that describes the research, and **it must highlight:**

1. Research question,
2. Its importance,
3. Review the historical background of the study,
4. Previous research in the scientific field in which the research is written,
5. It should review other methods and research conducted in the same context,
6. To the search itself and what it offers.

Therefore, the style for the first chapter consists of the following:

1. Introduction, when written, consists of **three main sections:**

- A. The problem
- B. The effect in general
- C. The effect in special

1.1 Aim of the study

When choosing aims, you must select aims that differ from the aims of previous studies

1.2 The objective of the study