Research Method

Research Questions

A good research question is essential to guide your research paper, project or thesis. It pinpoints exactly what you want to find out and gives your work a clear focus and purpose. All research questions should be:

- Focused on a single problem or issue
- **Researchable** using primary and/or secondary sources
- Feasible to answer within the timeframe and practical constraints
- **Specific** enough to answer thoroughly
- **Complex** enough to develop the answer over the space of a paper or thesis
- Relevant to your field of study and/or society more broadly

In a <u>research paper</u> or <u>essay</u>, you will usually write a single research question to guide your reading and thinking. The answer that you develop is your <u>thesis statement</u> — the central assertion or position that your paper will argue for.

In a bigger research project, such as a <u>thesis or dissertation</u>, you might have multiple research questions, but they should all be clearly connected and focused around a central <u>research</u> <u>problem</u>.

Research Design

A research design is a strategy for answering your <u>research question</u> using empirical data. Creating a research design means making decisions about:

- Your overall <u>research objectives</u> and approach
- The type of research design you will use
- Your <u>sampling methods</u> or criteria for selecting subjects

- Your data collection methods
- The procedures you will follow to collect data
- Your data analysis methods

A well-planned research design helps ensure that your methods match your research aims and that you use the right kind of analysis for your data.

You might have to write up a research design as a standalone assignment, or it might be part of a larger <u>research proposal</u> or other project. In either case, you should carefully consider which methods are most appropriate and feasible for answering your question.

Research Methods

Research methods are specific procedures for collecting and analyzing data. Developing your research methods is an integral part of your research design. When planning your methods, there are two key decisions you will make.

First, decide how you will **collect data**. Your methods depend on what type of data you need to answer your research question:

- Qualitative vs. quantitative: Will your data take the form of words or numbers?
- **Primary vs. secondary**: Will you collect original data yourself, or will you use data that has already been collected by someone else?
- **Descriptive vs. experimental**: Will you take measurements of something as it is, or will you perform an experiment?

Second, decide how you will analyze the data.

- For quantitative data, you can use statistical analysis methods to test relationships between variables.
- For qualitative data, you can use methods such as thematic analysis to interpret patterns and meanings in the data.

What is the difference between Research Design and Research Method?

Research design is a plan to answer your research question. A research method is a strategy used to implement that plan. Research design and methods are different but closely related, because good research design ensures that the data you obtain will help you answer your research question more effectively.

Which research method should I choose?

It depends on your research goal. It depends on what subjects (and who) you want to study. Let us say you are interested in studying what makes people happy, or why some students are more conscious about recycling on campus. To answer these questions, you need to make a decision about how to collect your data. Most frequently used methods include:

- 1. Observation / Participant Observation
- 2. Surveys
- 3. Interviews
- 4. Focus Groups
- 5. Experiments
- 6. Secondary Data Analysis / Archival Study
- 7. Mixed Methods (combination of some of the above)

One particular method could be better suited to your research goal than others, because the data you collect from different methods will be different in quality and quantity. For instance, surveys are usually designed to produce relatively short answers, rather than the extensive responses expected in qualitative interviews.

What other factors should I consider when choosing one method over another?

Time for data collection and analysis is something you want to consider. An observation or interview method, so-called qualitative approach, helps you collect richer information, but it takes time. Using a survey helps you collect more data quickly, yet it may lack details. So, you will need to consider the time you have for research and the balance between strengths and weaknesses associated with each method (e.g., qualitative vs. quantitative).