

A quick review of several areas of research methodologies

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Outline

- 1 General Overview
- 2 Research Problem
- 3 Literature Review
- 4 Specifying Purpose
- 5 Collect Data
- 6 Analyze
- 7 Report
- 8 More

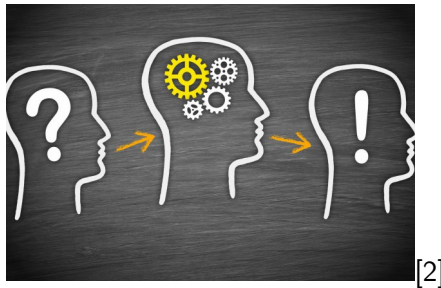


[1]

Research at a glance

Three basic steps:

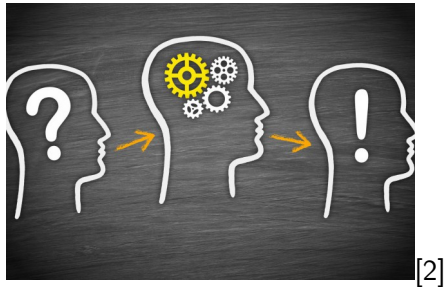
- 1 Pose a question



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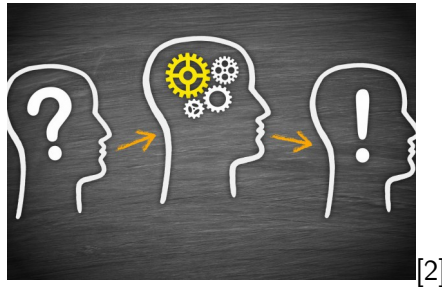
- 1 Pose a question
- 2 Collect data to answer the question



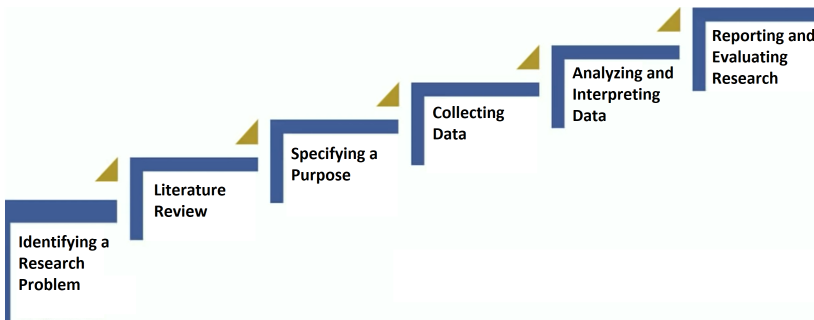
Research at a glance

Three basic steps:

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



Steps in the process



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Finding an interesting problem

- Select Topic of Interest



Finding an interesting problem

- Select Topic of Interest
- Some issue or problem that needs to be solved



Finding an interesting problem

- Select Topic of Interest
 - Some issue or problem that needs to be solved
 - You will state the problem in the introductory section of your paper and state the rationale for their importance.
- [3]



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Literature Review

- Who has studied the problem before?
What do they think?



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 - Locating summaries
 - books, and
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- Lit Review writing:
 - selectively choosing which literature to include in your review, and then summarizing the literature in a written



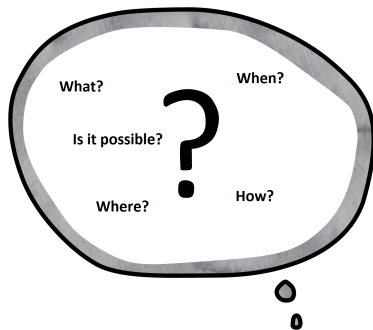
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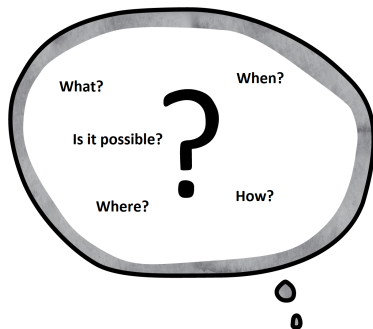
Research Question

- Identify major purpose or objective of the study



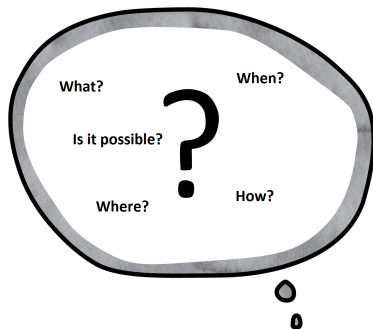
Research Question

- Identify major purpose or objective of the study
- Clear, Focused, Concise



Research Question

- Identify major purpose or objective of the study
- Clear, Focused, Concise
- Measurable, observable data or Participant experience



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Collect Data

- Identifying and selecting individuals for study



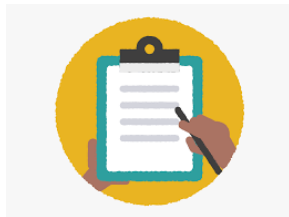
Collect Data

- Identifying and selecting individuals for study
- Obtain permission



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- Gathering information by asking questions or observing behaviour



Collect Data

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- Simulation



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Analysing and Interpreting data

- Drawing conclusions



Analysing and Interpreting data

- Drawing conclusions
- Represent information in table, pictures and figures



Analysing and Interpreting data

- Drawing conclusions
- Represent information in table, pictures and figures
- Explain findings



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Reporting and Evaluating Research

- Structuring the report



Reporting and Evaluating Research

- Structuring the report
- Presenting



Reporting and Evaluating Research

- Structuring the report
- Presenting
- Submitting



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Methodology and Methods

- Methodology is a rationale behind your research and the lens through which you will analyze your research.

Examples

Researchers systematically looks at a problem and tries various solutions to see how effective they are.

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 - Survey or questionnaire

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 - Survey or questionnaire
 - Controlled experiment

Quantitative and Qualitative

- Quantitative: conversion of observations into data for the purpose of analysis from a neutral "objective" perspective.

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Quantitative: conversion of observations into data for the purpose of analysis from a neutral "objective" perspective.

Qualitative: description and interpretation of observations from a biased, "subjective" perspective.

Ethics

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Objectivity

Bias recognition

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Integrity

Do the work!

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Do the work!

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Do the work, conscientiously

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Respect for intellectual property

Thou shalt not steal - any other person's ideas!!

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Do the work!

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Respect for intellectual property

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Confidentiality

Do not reveal anything that could get someone into trouble!

The end

Thank you for listening.

Bibliography

- [1] *What is research?* <https://youtu.be/mV0bUQpz468>, Accessed: 2021-03-18.
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