Research Problem and Research Question

Research Problem

- A Research problem is a question that a researcher wants to **answer** or a problem that a researcher wants to **solve**.

- statement about an area of concern (**situation**)

- a condition to be improved

- a difficulty to be eliminated

- a troubling question that exists in scholarly literature, in theory, or in practice

Main Purpose of Research Problem

It presents the importance of the research topic.

It helps the researcher place the problem in a **specific context** to properly define the parameters of the investigation.

It provides a framework that can help in **presenting the results** in the future.

Characteristics of Research Problem

- For a problem statement to be effective in the planning of applied research it should have the following characteristics (Andrew and Hildebrand 1982).

- The problem **reflects felt needs**
- The problem is **non-hypothetical**, ie it must be based on factual evidence
- It should suggest **meaningful and testable hypotheses** - to avoid answers that are of little or no use to the alleviation of the problem
- The problems should be **relevant and manageable**

Sources of Research Problem

- Personal experience
- Practical experience
- Previous research
- Social issues
- Brainstorming
- Intuition
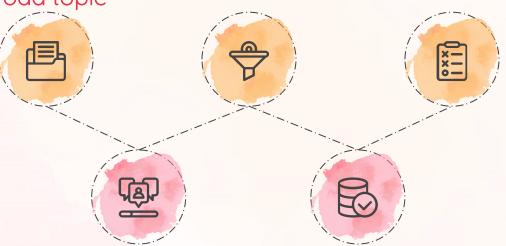- Exposure to field situation
- Consultation with experts

What is a Research question?

a <u>clear</u>, <u>focused</u>, <u>concise</u>, <u>complex</u> and <u>arguable</u> question around which you center your research.

Researh Problem and Research Question

Research Problem

The teachers at school X do not have the skills to recognize or properly guide gifted children in the classroom.

Research Question

What practical techniques can teachers at school X use to better identify and guide gifted children?

Example

Research Problem

Rising temperature/ heat index causing an increase in heat-related illnesses among vulnerable populations

Research Question

What are the health impacts of rising temperature and heat index on vulnerable populations?

What interventions can effectively mitigate heat-related illnesses among vulnerable population?

Example

Research Problem

Social media platforms face ethical dilemmas when moderating content, balancing freedom of speech with the need to prevent harm.

Research Question

How do different moderation strategies impact user perceptions of fairness and platform credibility?

What role should AI play in moderating content, and how can algorithmic biases be addressed?

Crafting the Objectives

Research Questions	Specific Objectives
What is the prevalence of heat-related illnesses among vulnerable populations?	To determine the prevalence of heat-related illnesses among vulnerable populations
What factors increase the risk of heat-related illnesses in vulnerable populations during periods of extreme heat?	To identify the factors contributing to heat-related illnesses in vulnerable populations.
What community-based interventions are effective in reducing the incidence of heat-related illnesses in vulnerable populations?	To evaluate the effectiveness of community-based interventions reducing the incidence of heat-related illnesses among vulnerable populations.

Rule of Thumb in writing a Research questions

1

Avoid YES or NO questions

2

Ask a question that will require you to explain or defend your answer

3

Ask a question that can be tackled in within your page limit

What is a good research question?

01 Focused and Researchable

- Focuses on a single topic and problem
- Answerable using primary or secondary data
- Does not ask for a subjective value judgement
- Does not ask why

02 Feasible and Specific

- Answerable within practical constraints
- Uses specific, well-defined concepts
- Does not ask for a conclusive solution, policy, or course of action

03 Complex and Arguable

- Cannot be answered with yes or no
- Cannot be answered with easily found facts and figures
- Provides scope for debate and deliberation

04 Relevant and Original

- Addresses a problem relevant to your field or discipline
- Contributes to a topical social or academic debate
- Has not already been answered

Example

- Bad: Why are social networking sites harmful?

- Good: How do privacy policies affect users of Facebook and Twitter?

Wrapped-up

http://youtube.com/watch?v=71-GucBaM8U&ab_channel=Scribbr

Your Turn

Write your research problem and draft your research question/s.