

An Introduction to Research

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Introduction

Research

Careful and detailed study into a specific problem, concern, or issue using the scientific method

Research process

- ▶ Identify the problem
- ▶ Define the problem (~~too broad~~ or ~~too narrow~~)
- ▶ A plan to answer the question
- ▶ Collect data
- ▶ Draw conclusion (potentially **RE**search)

Quantitative and qualitative research

- ▶ Quantitative: data-driven (statistical models, machine learning, deep learning, ...)
- ▶ Qualitative: social sciences (focus groups, interviews, ...)

More on research types

Quantitative research:

- ▶ Count things
- ▶ Large samples
- ▶ Know what you want
- ▶ Use statistics
- ▶ Generalize
- ▶ Be distant and **objective**

Qualitative research:

- ▶ Contextualize
- ▶ Small samples, in-depth
- ▶ Discover what you want
- ▶ Use words
- ▶ Find “meaning”
- ▶ Be involved and **subjective**

Research question

What is a research question

An answerable inquiry into a specific concern or issue.

- ▶ **Specify** your question
- ▶ Determine your goal (what do you want to know)
- ▶ Is your question answerable within your lifetime?
- ▶ Not too broad or too narrow

Are they good research questions?

- ▶ What activities of nurse managers are associated with nurse turnover?
- ▶ What predicts registered nurse retention in the US Army?
- ▶ Do the elderly diagnosed with dementia experience pain?
- ▶ Is yoga as effective as traditional physical therapy in reducing lymphedema in patients who have had head and neck cancer treatment?

Final presentation

Contents

1. What is the issue?
2. What is the current research related to this issue?
3. Choose one article and:
 - i. What was their research question(s)?
 - ii. Was the study an experimental or non-experimental design?
 - iii. What were the independent and dependent variables (if applicable)?
4. What are prevention strategies related to the issue?
5. Is this a public health issue in China? Are there differences in different countries related to this issue?
6. What are future steps related to research and practice?

Presentation notes

- ▶ The presentations should be no more than 15 minutes.
- ▶ Each student should have a speaking role in the presentation.
- ▶ Think about what is the most relevant or interesting information for your classmates.

Rubric 1

Presentation	Points Possible
Introduction to topic	15
Current research/journal article	25
Prevention strategies	15
Public health issue in China	20
Future steps related to research and practice	15
Question and answer	10
Total	100

Rubric 2

Presentation	Point
Did the group appear prepared?	30
Did group members have good eye contact?	15
Did group members connect with their audience?	25
Was the presentation organized and presented in a clear manner?	30
Total	100