What is a Research Problem?

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Overview

- The Research Problem
- Statement of the Research Problem
- Connecting Problem, Purpose, and Research Questions: The Big Picture
- Connecting with your Dissertation Chair
A research topic is the broad subject matter being addressed in a study.

A research problem is an educational issue or problem in the study.

A purpose is the major intent or objective of the study.

Research questions are those that the researcher would like answered or addressed in the study.

Hypotheses are predictions about what you expect to find
# The Connection

<table>
<thead>
<tr>
<th>Intent</th>
<th>Problem Statement</th>
<th>Purpose Statement</th>
<th>Research Questions</th>
<th>Hypotheses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>Issue or concern</td>
<td>Overall direction</td>
<td>Raise questions to be answered</td>
<td>Make predictions about expectations</td>
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<tr>
<td>Use</td>
<td>One sentence</td>
<td>One or more sentences</td>
<td>One or more questions</td>
<td>One or more statements</td>
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<tr>
<td>Use</td>
<td>Quantitative and qualitative research</td>
<td>Quantitative and qualitative research</td>
<td>Quantitative and qualitative research</td>
<td>Quantitative research</td>
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<tr>
<td>Where</td>
<td>Beg of introduction</td>
<td>End of introduction</td>
<td>After literature review</td>
<td>After literature review or in Methods</td>
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The Research Problem

- A problem is an actual situation that is hindering the overall effectiveness of an organization.
- The impact of the problem on the organization should be clearly stated.
- If the problem is too broad, the student may choose to address only certain aspects of the problem (be concise and focused).
- The problem should be stated in the form of a declarative sentence.
Questioning a Research Problem

- Can you gain access to the population?
- Can you find time, resources, and skills?
- Should the problem be researched?
  - Does it fill a gap in the existing literature?
  - Does it replicate a study but with a different population or in a different site?
  - Does it extend past research?
  - Does it give voice to people not heard, silenced, or rejected?
  - Does it inform practice?
Quantitative vs. Qualitative Research

**Quantitative**

Explaining or Predicting Variables

X  →  Y

The independent variable (X) influences a dependent variable (Y)

**Qualitative**

Understanding or Exploring a Central Phenomenon

In-depth understanding of Y; external forces shape and are shaped by Y

Quantitative vs Qualitative Research

- Use **quantitative research** if your research problem requires you to:
  - Measure variables
  - Assess the impact of these variables on an outcome
  - Test theories or broad explanations
  - Apply results to a large number of people

Distance learning

There are a limited number of students in distance education classes.

The purpose of this study is to determine how student engagement relates to faculty engagement in distance education courses at a large, private university in the Southeast.

What is the relationship between student engagement and faculty engagement in distance education courses at a large, private university in the Southeast?
Quantitative vs Qualitative Research

- **Use qualitative research** if your research problem requires you to:
  - Learn about the views of the people you plan to study
  - Assess a process over time
  - Generate theories based on participant perspectives
  - Obtain detailed information about a few people or research sites

An Example: Qualitative

Distance Learning

There are a limited number of students in distance education classes

The purpose of this study is to understand why students do not attend distance-education classes at a large, private university in the Southeast.

How do students experience online instruction at a large, private university in the Southeast?
5 Elements of a Problem Statement

- The Research Topic
- The Research Problem
- Background/Justification
- Deficiencies in the Evidence
- Audience
The Research Topic and Problem

- The Research Topic
  - The broad subject matter addressed by the study.

- The Research Problem
  - An issue or concern that an investigator presents and addresses in a research study.
Some Examples

- **Example 1**
  - Topic: Choking under pressure
  - Problem: Many athletes fail to perform at their optimal level when faced with a high pressure situation.

- **Example 2**
  - Topic: Reading
  - Problem: A number of K-12 students are not meeting the state standards in reading.

- **Additional examples?**
Background/Justification

- Reasons for the importance of studying the issue or concern
  - Evidence from the literature
  - Evidence from personal or workplace experiences
  - Evidence from experiences others have had in the workplace

- Include both local and global (or national) evidence
Additional elements...

- **Deficiencies in the Evidence**
  - The area of need in relation to the problem and the deficiency or lack of evidence in the literature

- **Audience**
  - The individuals and groups who will read and potentially benefit from the study.
Example of the Flow of Ideas in the Problem Statement

Flow of Ideas

Topic
- Research Problem
- Justification for Research Problem
- Deficiencies in the Evidence
- Relating the Discussion to Audiences

Subject area
- Concern or issue
- A problem
- Something that needs a solution
- Evidence from the literature
- Evidence from practical experience
- In this body of evidence what is missing or what do we need to know more about?
- How will addressing what we need to know help researchers, educators, policy makers, and other individuals?

An Example
- Ethical issues in colleges
- Ethical violations among football recruiters
- Reports of violations
- Description identifying and characterizing violations
- What does the literature cover?
- What are the gaps in the literature?
- Carve out your niche here
- Assessing violations
- Helps recruiters develop better ethical standards
- Helps athletes understand ethical issues
Today’s Work Session Template

- Develop Problem Statement
Connecting with Your Dissertation Chair

- Regular meetings on Zoom, Skype, Google Hangouts or FaceTime.
  - Allows meetings convenient to both your schedules
  - Provides opportunities to discuss potential research problems to investigate
  - Keeps you motivated and looking forward to next steps in the process
  - Promotes a closer working relationship with your Chair
  - Provides opportunities for you and your Chair to see each other as collaborators in the research process
Connecting with Your Dissertation Chair II

- Be assertive
  - Assertiveness is the happy medium between being too passive (most doc students) and too aggressive. This is your dissertation, so be confident in voicing your opinions while being sensitive to the needs of your Chair and other stakeholders.

- Come with a clear agenda for every session
  - Dissertation Chairs (and you!) are busy people. Make every minute count in your meeting, take notes and carry out what you agree to.

- Decide in advance how you would like to resolve a problem or impasse in the dissertation process
  - Think about the pros and cons of each possibility to make your discussions more efficient while impressing your Chair at the same time.

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