Selecting and Defining a Research Topic

Stephen E. Brock, Ph.D., NCSP
California State University, Sacramento

Review

- Qualitative Research
  - Narrative
  - Ethnographic
- Quantitative Research
  - Descriptive
  - Correlational
  - Group Comparison
    - Causal Comparative (or Ex Post Facto)
    - Quasi Experiments
    - True Experiments

Selecting a General Research Topic

- Four principles guide topic selection.
  - Personally interesting
  - Practical & Feasible
    - available population
    - can be investigated (measurable)
  - Important
    - worthwhile
  - Ethical
    - Study will cause no harm
Selecting a *General* Research Topic

- Identify an **area of interest** (Personal).
  - ADHD brought with me to UCD
- Identify an **available** population and/or setting for study (Practical).
  - ADHD and elementary children (work in K-6 schools)
- Consider an **issue(s)** related to the area of interest that can be studied (Feasible).
  - ADHD and academic achievement (lots of measures of achievement, lots of study in this area)
- Identify a **worthwhile** research question (Importance).
  - Reading comprehension of ADHD children (no prior study)
- Make certain the conducting the study will not harm anyone (Ethical)
  - study would provide useful data to participants and would not harm

---

Portfolio Assignment #1

- What are your research interests?
- Identify others who share your interests.
- Use the just discussed 4 guiding principles and apply them to your own areas of research interest.
  1. How is the area personally interesting?
  2. Is the area practical and feasible to study?
  3. Is the area important to study?
  4. Is it ethical to conduct study in this area?

---

Sources of **Specific** Research Ideas

- Theory (e.g., Skinner or Piaget)
- Replication
- Research Discussions
- Future research
- Textbooks
  - Literature reviews
- Course work
- Colleagues
- Listserves
- Personal/Professional experiences & observations

---
Selecting a Topic, Narrowing, and Stating a Research Question

1. Personal + Practical/Feasible + Important + Ethical = A good topic!
2. Narrowing the topic down is especially important for quantitative research.
   - Consult with advisors
   - Review textbooks
3. State the Research Question
   - Describe the population of interest
   - Describe variables
   - Describe relationships among them

Purposes of the Literature Review

- Provide essential background knowledge.
  - The "textbook" for your research question.
- Identifies what has already been done.
  - Clarifies what is already known.
  - Justifies the research effort. Why is the study needed?
- Identify prior research mistakes.
- Provides study rationale
- Facilitates interpretation of the results.

Content of a Literature Review

- An Example: ADHD & Reading Comprehension
  - Provides an overview of the background or context within which the research exists.
    - Conceptualizations of ADHD
      - A Brief History of ADHD
      - The Current Conceptualization of ADHD
      - A Conceptualization of Reading Comprehension
        - Note: would be much briefer in a journal. Identifies the importance of the research questions. Justifies the research effort.
  - Provides a documented, logical rationale for hypotheses.
    - Origins of the Research Question
    - How ADHD May Affect Reading Comprehension
Activity

- State a research question.
- Identify important background knowledge.
- How might the literature be used to justify the research effort?

Conducting a Literature Review

- Searching for books
- Become familiar with library resources.
- Know how to use a variety of databases.
- Begin with a broad review (secondary sources).
  - Start with seminal works, textbooks, handbooks, encyclopedias, review articles, etc.
  - Progressively narrow down the reference search and begin to review primary sources.
    - Avoid the temptation to include everything.
    - BE SYSTEMATIC AND ORGANIZED!!!

Computer Searches*

- Identify keywords
- Know how to read abstracts and how to locate documents.
- Identify Relevant Databases
- Commonly used Databases
  - ERIC
  - PsycINFO
  - Dissertation Abstracts
  - The Internet
    - http://www.google.com
    - https://www.youtube.com/watch?v=V_CgPsGY5Mw

*Caution: The inclusion criteria in some databases is not very rigorous (if present at all). Give information from a peer reviewed journal more weight. This is not to say that “junk” does not sometimes find its way into journals. Books often include what sells.
Identify Keywords
Identify Relevant Databases
Commonly used Databases
- PsycINFO
- ERIC
- http://library.csus.edu/

Using Databases

NCBI PubMed

PubMed, a service of the National Library of Medicine, provides access to MEDLINE, a database of references and abstracts of journal articles for life sciences and biomedical topics.


PubMed's growing number of online databases can now be searched at once!
Organizing the Results of the Literature Review

- Locate the article
- Scan it to determine relevance
- Copy/Save the article (if relevant)
- Read the article
- Code the article
- Make notes on how it will be useful

Writing the Literature Review

- Develop an outline
  - Appreciate it may take some time to get to this point
- Determine how the identified sources fit into the outline
- Organize parts into a meaningful whole
- Develop the reference list
Summary

- The literature review should parallel the research development process. It begins with a broad focus (providing the reader with essential background knowledge) and concludes with a narrow focus (presents and justifies a specific research question or hypothesis).

Next Meeting

- Preliminary Research Design
  - Read Educational Research, Ch 4 & 5
  - Portfolio Activity 2: Develop preliminary hypotheses
    - Template available: http://www.csus.edu/indiv/b/brocks/courses/eds/eds%20250/student_materials.html

---

EDS 250 19

---

EDS 250 20

---

EDS 250 21

---

EDS 250 22

---

EDS 250 23

---

EDS 250 24

---

EDS 250 25

---

EDS 250 26

---

EDS 250 27

---

EDS 250 28

---

EDS 250 29

---

EDS 250 30

---

EDS 250 31

---

EDS 250 32

---

EDS 250 33

---

EDS 250 34

---

EDS 250 35

---

EDS 250 36

---

EDS 250 37

---

EDS 250 38

---

EDS 250 39

---

EDS 250 40

---

EDS 250 41

---

EDS 250 42

---

EDS 250 43

---

EDS 250 44

---

EDS 250 45

---

EDS 250 46

---

EDS 250 47

---

EDS 250 48

---

EDS 250 49

---

EDS 250 50