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Methodologies and Empirical Research

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WRITING DISSERTATION METHODS AND RESULTS

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Or, what to include in chapters 3 and 4

Session Outline

- General content and organization of chapter 3
- Writing a defensible plan
- General content of chapter 4
- "Traditional" versus manuscript format
- Strategies for success

Purpose of the dissertation proposal is to determine if the study is worth doing and *can the student do the study*.

What is Chapter 3?

Dissertation methods

- Chapter overview
- Research Design
- Epistemology and researcher stance (qualitative)
- Data source (sample)
- Instrumentation or Materials
- Procedures
- Data Analysis
- Length = 20 to 50+ pages

Journal manuscript methods

- Usually no overview
- Design not always described
- Epistemology and researcher stance (qualitative)
- Data source (sample)
- Instrumentation or Materials
- Procedures
- Sometimes presented in results
- Length = 5 to 10 pages

Why are dissertation methods so lengthy?

• Much greater level of detail

- Sufficient to demonstrate a well-conceptualized plan
- Justification of decisions
 - Based on good research practice
 - Cited sources
- Additional table(s) or figure(s)
 - Table summarizing methods used in prior research
 - Table or figure summarizing steps in the procedure
 - Path diagrams, figures, or photographs
- Pilot study findings

What type of information should you include regarding the research design?

What will you include about the sample?

Target population

- Salient characteristics of site, source(s), sampling frame
- Sampling design
 - Sampling and recruitment procedures sometimes included in Procedures instead
 - Includes time and occasion sampling
- Sample size
- For surveys, response rate (anticipated and actual)

What's the purpose of an <u>Instrumentation</u> and/or <u>Materials</u> section?

What type of information should you include?

How should you organize?

What will you include in the Procedures section?

The Data Analysis Section

• For qualitative studies

- Identify, describe, and support specific method(s) for coding and analyzing the data
- Describe specific efforts you will use to ensure trustworthiness

• For quantitative studies

- Describe preliminary and descriptive procedures
- Indicate which inferential procedures you will use to answer your RQs
 - Assumptions and diagnostics
- Alpha or level of significance
 - Consider adjusting alpha if running multiple analyses
- Software and version

When justifying your methods decisions consider --

• Ability to answer your RQs and/or test your hypotheses

Feasibility



• Training, knowledge, biases, and/or preferences of your committee



"Avoid the use of <u>excessive</u> or <u>inadequate</u> number of research subjects by making informed recommendations for study size" (from ASA Ethical Guidelines)



Why conduct a pilot study prior to the proposal defense?

Pilot Study

- For quantitative dissertations, a pilot study should <u>always</u> be conducted prior to the proposal defense
 - Briefly describe pilot procedures and summarize major findings/insights
 - Highlight any changes made as a result of the pilot study
- For qualitative dissertations, solicit feedback on interview questions
 - If feasible, try out interview questions and/or observational protocols in advance
- Pilot study is presented in Chapter 3, typically under Procedures

Appendices for Methods

- Draft IRB application and consent form
- Survey or other data collection instruments
- Materials
- Letters of permission
- Interview protocol
- Computer code
- Other?

As you're writing the methods chapter, make sure you provide sufficient detail for potential replication.

Be prepared to defend your decisions.

Changes to Methods Chapter between Proposal and Final Dissertation

• Add description of participants/subjects

• For studies using surveys, tests, or self-report instruments, add psychometric information for current sample

• Verb tense

• What actually happened versus what you planned to do

What is the purpose of Chapter 4?

Contents of Chapter 4

- For quantitative studies:
 - Begin with descriptive information (demographics should be in Chapter 3)
 - Organize (usually) by research question
 - Length between 10 to 60+ pages (typically 40 to 50)
- For qualitative studies:
 - Format of results more varied, e.g., narrative, poetry, case by case, or traditional
 - Usually includes numerous direct quotations
- Begin the chapter with an overview of the chapter organization
- End the chapter with a summary of key findings

When should you use tables, figures, or text?

Tips for tables and figures

- Use tables for demographic characteristics and for multiple descriptive statistics
- Clearly label (should stand alone)
- Use text to highlight notable patterns
 - Make sure to comment on tables or figures
- Don't repeat table information in the text
- Don't include tables or figures unnecessarily
- If your study includes numerous statistical tests, you should consider an overall summary table

Appendices for Results

- Move "extra" tables to an appendix
- For qualitative studies, some advisors will require copies of complete transcripts in an appendix

"Traditional" versus Manuscript Format

- Traditional ____ 5 chapters
- Manuscript format
 - Usually first 3 chapters are same as traditional
 - For master's theses, one manuscript minimum
 - For dissertations, at least two manuscripts
 - Manuscripts must represent different studies or distinctly different aspects of the same research line
 - Must be stand-alone
 - Often include repetitive information from first three chapters

Strategies for Success

- Read multiple, high quality dissertations
- Keep anecdotal records and other documentation throughout the process
- Pilot your procedures <u>before</u> the proposal defense
- Be proactive in anticipating committee's questions
- Justify <u>all</u> decisions
- If possible, attend a classmate's proposal defense
- Use the appropriate verb tense
- If you're not a good writer, get help with your writing
- <u>Communicate</u> with your advisor and committee

Questions?