Writing Your Thesis Methods and Results

Christy Ley Senior Thesis Tutorial November 15, 2013

Overview: Thesis Structure

- O Introduction
- O Literature Review
- O Hypotheses
- Methods
- Results
- O Conclusion

Recap: Last Time

- O Introduction (in short)
- O Literature Review
- O Hypotheses (in short)
- O Methods
- O Results
- O Conclusion
- + Overall Writing Strategies and Your Questions

Today's Focus

- O Introduction (in short)
- O Literature Review
- O Hypotheses (in short)
- Methods
- O Results
- O Conclusion
- + Overall Writing Strategies and Your Questions

Why am I writing a methods chapter?

Two Key Purposes

- (1) To provide information so that readers can assess the reliability and validity and of your results.
- (2) To give the reader information sufficient for <u>replicating your</u> <u>study</u>.
- O So, what information is required to accomplish these goals?...

First, a quick Soc 128 recap!

Reliability (whether you can consistently achieve these results)

- If others conducted the study, would they obtain the same results?
- Also, if your sample were different (but of the same theoretical or empirical category), would you obtain the same results?

Validity

- Are you measuring what you think (and say) you're measuring?

To show that the answer to those questions is "yes"...

Describe the following:

- (1) From where and from whom you obtained your data
 - O E.g., Field site, interview participants, survey respondents
- (2) How you <u>operationalized</u> each of your concepts (for both independent and dependent variables)
 - C E.g., Extant questionnaires, survey questions, conditions for coding quantitative or qualitative data
- (3) How you <u>analyzed</u> your data
 - O E.g., Type of regression models, hand-coding and using Atlas.ti

Let's look at each of these components in further detail for each of the types of methods you're using...

<u>Note:</u> The particular specifications are guidelines for what is generally useful to include. Your research question, theoretical motivations, and specific methods will ultimately guide what you should include so that readers can answer "yes" to each of the questions I indicated earlier.

(1) From where and from whom you obtained your data

Ethnography/Observational Fieldwork

- What site(s) did you select and why?: "Because the purpose of this project is x, I did y."
- Description of field site: general location, type of organization
- How you gained access
- **Duration of fieldwork**: over time (e.g., 6 months) and how frequently (e.g., 3 hours/day, 5 days/week)
- Your role: observed off in a distance, participated in same activities (e.g., became a cop to study cops), participated but in some other role (e.g., intern to study funeral home directors)
- Key informants: explain your relationship, how they informed your work
- Other participants: descriptive characteristics relevant to your project, their roles, your relationship with them
- **EXAMPLE:** See methods section of Desmond 2012 "Disposable Ties and the Urban Poor" in American Journal of Sociology.

(1) From where and from whom you obtained your data

Interviews

- With whom did you conduct interviews and why? Written description and table with theoretically relevant characteristics (use pseudonyms, unless otherwise arranged with IRB and participants), such as age, race, gender, occupation, residency (again, what is relevant depends on your particular question)
- Types of interviews: e.g., in-depth, semi-structured
- Number of interviews: specify if repeated interviews with same respondents and why
- Length of interviews: range and average
- Recruitment technique: e.g., stratified random sampling, snowball sampling, use of initial personal contacts
- Where you conducted the interviews: coffee shops, participants' homes or place of employment, via phone/Skype

(1) From where and from whom you obtained your data

Quantitative/Large Datasets

- Which dataset did you select and why?
- General purpose of dataset
- Description of sampling frame and sample: key theoretically relevant characteristics and how they relate to your research question. Often useful to provide proportions or means and standard deviations for various demographic information (e.g., racial composition, age)
- How participants were recruited (if you collected your own data)
- Response rate

(2) How you operationalized each of your concepts

Ethnography/Observational Fieldwork

- Types of behavior and interactions you were focused on
- How you reconciled any inconsistencies between attitudes and behaviors
- Define and explain theoretical relevance of the concepts through which you interpret behavior: culture, frames, repertoires

(2) How you operationalized each of your concepts

Interviews

- Explain questions and how they relate to your theoretical goals: Substantive topics discussed <u>and</u> ways that you indirectly tapped certain concepts
- Interview schedule (for Appendix)

(2) How you operationalized each of your concepts

Quantitative/Large Datasets

- Separate subsections for explanatory (independent) and outcome (dependent) variables
- Describe existing codes (e.g., US Dept of Labor Standard Occupation Classification).
- Which items you selected to measure which variables
- Any averaging or summing of multiple items, for purpose of measuring one concept (e.g., a questionnaire with 10 items that collectively indicate level of happiness). Also, report Cronbach's alpha in these cases.

(3) How you analyzed your data

Ethnography/Observational Fieldwork and Interviews

- How you reviewed your data: transcribed audio recordings in full or part, reviewed notes taken from interviews or field notes
- By which method did you code: by hand, with software
- How you further explored and analyzed data: when you began reviewing for themes, level of codes you developed (e.g., broader topic and conceptual codes, then moved to particular theoretical codes), measure of frequency, measures of which codes varied by groups of individuals
- Coding schemes: coding scheme that emerged, whether others were involved in coding

(3) How you analyzed your data

Quantitative/Large Datasets

- Types of models and why you selected them
- Primary explanatory variables included
- Controls and explanations for why they were included
- Reasons for any interaction terms
- Groups compared and why
- How you dealt with issues like missing data and why

*** If you provided someone with your dataset and your methods section, s/he should be able to estimate identical models.***

(e.g., need to know which observations were excluded, whether missing data were estimated using multiple imputation)

Summary of Methods Chapter Strategies

- Most important: Explain each of your methodology choices by linking it to what you want to learn. Show how your methods are the best way to answer your research question how various methodological choices you made (e.g., decision to do multiple site comparison) provided leverage for understanding the empirical reality.
- O Simply state precisely how you conducted your research. This is not the time for creative or flowery prose.
- O Create sections for each of the components.
- O Double-check whether the reader would be able to answer "yes" to each of the questions I noted earlier.

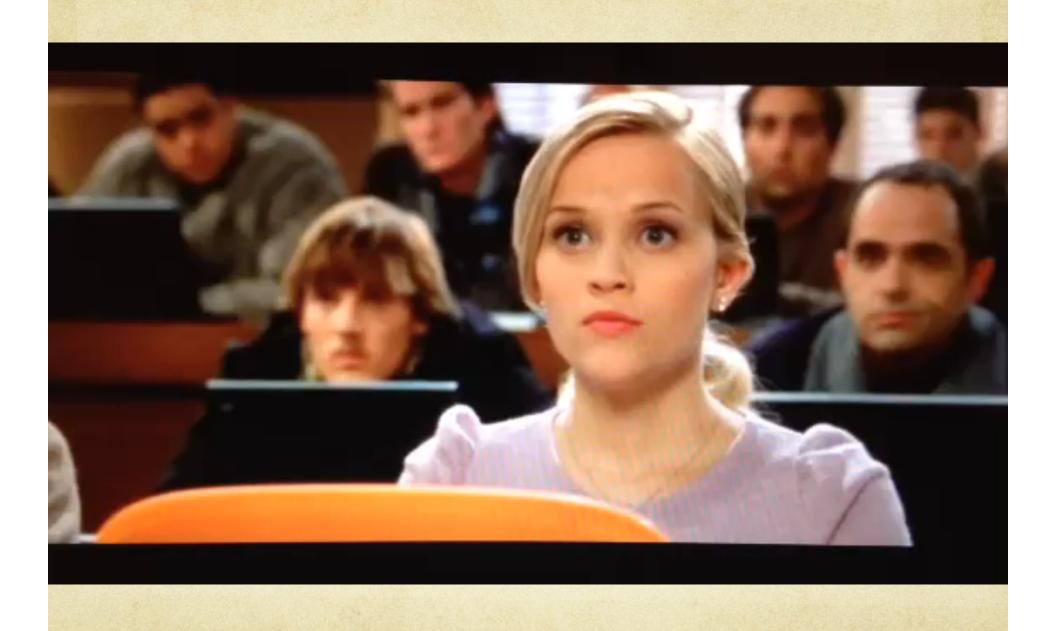
A reminder

Reliability (whether you can consistently achieve these results)

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Results: The Evidence for Your Claims

The Basics Goals

- (1) To provide <u>only factual statements</u> about what you found, <u>not interpretations or explanations for why</u> (that will be included in your discussion that follows).
- (2) To provide <u>sufficient</u> facts for the jury (your readers) to reach their own conclusions. They shouldn't just have to take your word on the conclusions.

Key Ways to Accomplish These Goals

Structure Findings

- For quant, begin with more basic models to provide some support for your claims and then move into more elaborate analyses and nuances of claims (e.g., adding controls).
- For qual, various approaches: main theme first or building up (not just this, but also this other bigger or more unexpected thing)
- Provide a range of findings, not just those that support your hypotheses.
 - For quant, this can mean explaining that in some models your variables of interest no longer have a significant effect.
 - For qual, this can mean explaining how many respondents indicated views consistent with your code and also how many (and in what ways) others differed.

Other Tips for Presenting Findings

- Use tables and graphs...but don't use them as a crutch! Write a sufficient amount so that the reader can largely understand your findings without referring to the tables.
- Interpret statistics: Different from interpreting the findings more generally. E.g., explain what a particular odds ratio means in practical terms ("associated w/30% increase in the likelihood of engaging in some practice"
- <u>Be precise</u> with units of analysis, number of observations, p values corresponding to stars in regression tables.
- O <u>Use subheadings</u> to capture key themes that emerged in qualitative data or different categories of analyses for quantitative data.

Work hard and feel free to be in touch!

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