

POLITICAL SCIENCE 461 | FALL 2017

SENIOR THESIS IN POLITICAL SCIENCE



Agenda:

1. Assignment: Methodology
2. Research Methodology & Research Design
 - a. Qualitative design
 - b. Quantitative design
 - c. Sampling methodology


Monday, November 13: Methodology Week 8

		Methodology	Design	Qualitative	Quantitative	Sampling
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Basic (Suggested) Structure of a Thesis						
#	Component	Suggested Length				
Pre	Title Page	1 page: does not count toward total pages				
	Abstract	100 to 250 words: does not count toward total pages				
1	Introduction Research Question Argument	PROPOSAL		3-5 pages		
2	Literature Review	FINISHED		8-10 pages		
3	Methodology	DUE THIS FRIDAY		4-5 pages		
4	Results	WINTER QUARTER		12-15 pages		
5	Conclusion			3-5 pages		
Post	References	20 sources minimum: does not count toward total pages				
	Appendices	Optional				

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Methodology Design Qualitative Quantitative Sampling

Methodology (20%)




Objective: Write about the systematic approach and plan of your project.

**Due November 17 (Week 8)
This FRIDAY**

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Methodology and Research Design



The plan that guides the investigator in the process of collecting, analyzing, and interpreting observations.

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Good Research Design

Good research design is imperative, but we face serious constraints in methodology.



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Writing about methodology

In any study, the researcher should include the following information:

1. Type of research design
2. Units of observation (cases)
3. Number of variables
4. Number of observations (n)
5. Time period of study
6. Study population
7. Sampling information
8. Relevant claims about external and internal validity

Methodology. The following study is a **case study analysis**. There are four cases included in the study. The **units of observation** are countries (Slovenia, Croatia, Hungary, and Austria). These four countries are compared on six **variables**, each dealing with the economic viability of these countries between 1972-2010. These countries were chosen from those classified as Eastern European countries by the European Union. They were **purposively** chosen as they share borders. Given this **sampling** method, we cannot be certain that the findings of this study applies to other countries in Eastern or greater Europe.

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Qualitative & Quantitative Research



Qualitative Data represented by descriptions, mostly observed

Quantitative Data that is represented numerically, measured in specific units.

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Types of Research Methodology

For thesis, each of us needs to choose a specific type of research design that helps us generate evidence to prove our argument.

Qualitative (small-n)	Quantitative (large-n)
Case studies	Content analysis
Interviews	Survey research
Fieldwork & observations	Experiments
Theory	Data analysis

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The drawbacks of methodology

Internal validity: Refers to the ability of the research design to conclusively prove a causal relationship without systematic bias
Qualitative studies have **high internal validity** because they are an intense examination of a few cases.

External validity: Refers to the representativeness of the research design and its ability to generalize the findings
Quantitative studies have **high external validity** because they include a large number of cases.

In addition to describing the methodology, you should **identify flaws** in the methodology as well.

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Qualitative Research Design



- Case studies
- Interviews
- Fieldwork
- Theory

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Case Studies

A comprehensive examination of **one** or a **few** cases.


1. Justification
2. Process of examination

What are cases?
Cases are your unit of analysis. They can be almost anything: countries, regions of the world, places, events, people, laws, etc.

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Most-Similar Design



Purpose: To examine cases that are **very similar**, with one exception—the probable cause, and to use that to **explain that key difference** amongst your cases.

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Life Expectancy


Hypothesis: Redistributive government systems are likely to increase the life expectancy of citizens.

Potential Causes (Independent Variable)	India	China
Disadvantaged backgrounds	Yes	Yes
Moderate economic growth	Yes	Yes
Adequate calories	Yes	Yes
Government redistribution of resources	No	Yes
Outcome	57 years old	69 years old

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Most-Different Design



Purpose: To examine cases that are **very different**, with one exception—our probable cause, and using that to **explain similar outcomes** amongst your cases.

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Presidential Popularity


Purpose: Polarization amongst the political parties determines the popularity ratings for the president.

Potential Causes (Independent Variable)	Bush (2007)	Obama (2015)
War in Iraq	Yes	No
Economy doing well	No	Yes
Party has majority in Congress	No	No
Gas under \$2.00	No	Yes
Outcome	Ratings below 50%	Ratings below 50%

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Single Case Studies



Purpose: To examine only one case in depth.


Extreme Case: A clear case of a hard-to-measure or rare concept (Nazi Germany, North Korea)

Typical Case: A common case that is explained in detail.

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Interviews



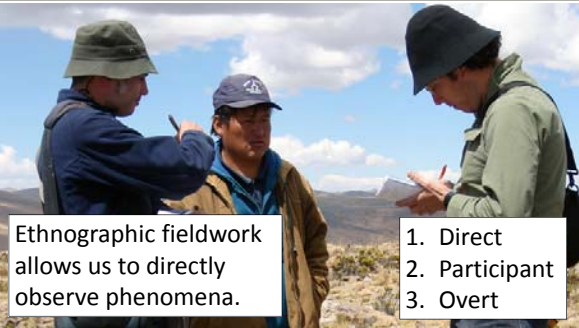
Interviewing is good for elite populations and exploratory research.

1. Identifying subjects
2. Preparation
3. Recording
4. Transcription

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Fieldwork



Ethnographic fieldwork allows us to directly observe phenomena.

1. Direct
2. Participant
3. Overt

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Question Types

Don't forget to pay attention to question wording and ordering!

Closed-ended questions

Include questions about demographics!

Open-ended questions

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Experiments

Experiments have a long history in the social sciences.

3

The assignment of observations to treatment and control groups.

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September 11th Imagery

Hypothesis: Exposure to imagery or references of 9/11, is likely to increase support United States military action.

9/11 references

Cal Poly Pomona voters

Surveys with images → Support for War in Iraq

Plain surveys w/ no images → Opposition for War in Iraq

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Data Analysis

You can use SPSS to analyze publically available datasets, but you must describe the source, study population, data collection method and sample.

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Sampling

The process in which we select our sample from a larger population.

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Types of Sampling

Probability: Every element has a known probability of being included in the sample.

Nonprobability: Every element has an unknown probability of being included in the sample.

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Probability Sampling		
Sampling Method	Description	Example
Simple random sample	Every single element has an equal chance of being included in the sample.	Random number generators.
Stratified sample	Elements sharing one or more characteristics are grouped than are randomly sampled proportionally.	Proportional via ethnic/racial lines; but randomly selected with a list of each group.
Cluster sample	A probability sample in which we don't have a complete list of elements of the sample.	We sample city blocks randomly.

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Nonprobability Sampling		
Sampling Method	Description	Example
Purposive sample	The researcher exerts a considerable amount of discretion over the observations included.	Surveying members of Congress
Convenience sample	The researcher includes specific observations in the study because it is convenient to do so.	Sampling students on campus
Quota sample	The researcher samples elements proportionally, but non-randomly	Racial/ethnic quotas
Snowball sample	The researcher asks respondents to help identify other respondents of interest	Drug users, campaign or political activists

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You too can write about methodology!

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