**MERITS OF METHODOLOGY:**

**How to Conduct Systematic Political Research**

**AIMS:** This lecture is an introduction to research methods in political studies. It aims to address the following questions:

* What are the different methods of comparison in political research?
* What is a single case study?
* How can I use quantitative literature in my assignments?
* What is the difference between applying a theory and the theory-referral?

# Section One: Why and the What of Methodology

## What is methodology?

Methodology is the *way* that we go about answering a research question. There are many different options to choose from, depending on the type of question that we want to answer, and the type of evidence that we would like to (or are able to) use.

## Why do we use a methodology?

The goal of political studies literature is to **answer questions** regarding the relationships between a set of concepts. ‘Methodology’ therefore refers to the **strategy** that researchers use to answer questions about political phenomena.

As previously explained in the lecture on ‘Research and Write in Political Studies,’ social sciences research aims to apply the scientific method as closely as possible to the study of human behaviour by examining the **relationships** between at least two concepts.

This course, for example, addresses the following questions:

* How should we study conflict?
* **What causes conflict? (The examples in this lecture will refer to this question.)**
* Who participates in conflict?
* How do people behave during conflict?
* What are the consequences of conflict?
* How do we evaluate conflict?

Each question can be answered in a variety of different ways—depending on the method that one employs.

*Q: What is the key similarity between Mamdani (2001) and Collier & Hoeffler (2004)?*

A: Both address the causes of political violence within the confines of the state.

Mahmood Mamdani, When Victims Become Killers (Princeton, NJ: Princeton University Press, 2001).

Paul Collier & Anke Hoeffler, Greed and grievance in civil war (Oxford Economic Papers, 2004, 56(4):563-595).

The two studies are undoubtedly different in terms of both their scope and methods

* Mamdani (2001): Rwandan genocide, 1994, qualitative.
* Collier & Hoeffler (2004): civil conflicts, 1960-1999, quantitative data.
* ***NB*: ‘qualitative’ and ‘quantitative’ refers to the type of data/evidence that a study employs, not necessarily the method.**

# Section Two: Distinguishing between theory-testing and theory referral

Theory is an attempt to logically and systematically explain real-life phenomena. (This is covered in the first lecture in this series “Concept, Theory and Case”.

**Theory-testing** is when you apply the **logic** of a theory to a case in order to illustrate the strengths and weaknesses of the theory’s ability to successfully explain the phenomenon being studied.

Stress to students that they cannot deviate from the logic of a theory when they are applying it to the case. The analysis of the theory should follow the untainted application of the theory. Importantly, one should not try to adjust the theory to fit the case. This suggests a misunderstanding of how to use this method or of the theory itself. If the theory does not fully explain aspects of the case then this should be discussed in the analysis and it should be noted what the consequences of this shortcoming/oversight are. Note that single observations do not prove or disprove a theory – rather, they suggest scope for further investigation. For example, one may wish to apply the ethnic security dilemma theory when trying to suss out what the causes of an intrastate war are.

**Theory-referral** is less restrictive than theory-testing. It is used as an illustrative tool within a paper because a component of the theory’s logic is particular useful in order to explain a point. For example, the idea of a ‘window of opportunity’ in the Posen’s *The Security Dilemma and Ethnic Conflict* may be helpful in order to explain a point about taking advantage of a political climate in order to launch a new political party.

# Qualitative and Quantitative Evidence

Qualitative and quantitative data are different types of evidence that can be used to answer a question. They are not methods, but rather they can imply that certain methods should be applied in order to use the evidence. They are not mutually exclusive. “Q-squared” is a term used to mean that both quantitative and qualitative evidence have been used.

## Qualitative evidence

Concepts are analysed based on the interpretation and cross-verification of the data the researcher collects. There are different types of evidence that can be collected within this the qualitative approach. Often it is narrative evidence gathered through interviews, focus groups, discussions etc. There are different ways to structure the sessions that are used to gather this data. One could employ an open-ended, semi-structured or close-ended method of questioning. There differ in the degree to which the researcher impose conditions that limit the type of answers that will be received from their subjects. There are particular techniques that can be used to interpret the information gathered.

## Quantitative evidence

Concepts are numerically measured. This means that abstract ideas somehow need to be quantified. This process is called “operationalization”, which entails the conversion of a concept into a variable.

There are two types of variables:

* Dependent variables – the outcome of an event/phenomenon. Written as “Y”.
* Independent variables – the factor(s) that are considered to *cause* the outcome. Written as “X”.
* For example, consider the Mamdani reading about the causes for mass participation in the Rwandan genocide. The dependent variable (X) is the genocide. The independent variables (Y) are 1) fear; 2) the economic crunch; and c) the Rwandan culture. Mamdani examines how convincing each of the independent variables are as causes of the genocide. It is possible to find that an outcome is caused by a number of different input variables.

Variables are deconstructed into measurable components named “indicators”. The word “indicator” is suggestive of its function – it is a concrete indication of the abstract concept that you are trying to measure. Sometimes indicators themselves are not directly measurable, and need an indicator of their own. This is called a “proxy”.

* For example: The Human Development Index (HDI) argues that the concept “development” needs to be measured by looking at three indicators: health; education; and standard of living. You should be able to see from this that “development” has been divided into three areas for measurement. However, these three components are still abstract and cannot be directly measured. Therefore, they each need proxies. Let’s consider “education”. Education is proxied by looking at the number of years spent in school as well as adult literacy rates. These two education proxies are quantified and can be numerically represented.

**Class activity:** ask students how they might measure the concepts: conflict; democracy; ethnic tension; inequality. Slide 17.

Note to the students that there is often a large amount of debate about how these concepts should be measured – in other words, what the indicators and proxies ought to be to measure them.

Go over some of the advantages and disadvantages of using the qualitative and quantitative methods. Remind students that this is not a dichotomous choice. See slides 18-19.

# Three Basic Methods

***Whether you use qualitative or quantitative data, your research must be systematic.***

There are three basic approaches, or methods, to answering a research question:

1. Large-*n*
2. Small-*n*
3. Single case study.

The symbol ‘*n*’ refers to either the number of countries or cases/observations under study.

**Large-*n***: compare political phenomena across a **large number** of countries and/or cases.

* > 50 cases.
* Generally applied to quantitative analysis of data on a large number of variables, which uses statistical methods to achieve ‘control’. Example: Collier & Hoeffler (2004).
* One famous exception: *The Clash of Civilizations* by Samuel Huntington (qualitative, large-n study).

**Small-*n***: compare political phenomena across a selected number of countries and/or cases.

* 2-20 cases.
* Cases are **intentionally selected** according to the similarities to and differences from each other in order to establish ‘control’.
* Often called the ‘comparative method.’
* Most Similar Systems Design (MSSD):
  + Similar cases/characteristics.
  + Different outcome.
* Most Different Systems Design (MDSD):
  + Different cases/characteristics.
  + Same outcome.
* **Both research designs aim to discover the commonality between the cases that explains the observed poltical outcome—whether it is different or similar.**

*Q: Which cases would you use to investigate the link between ethnic tensions and civil war, using the MSSD design? Explain what criteria you would use to choose the cases. If possible, give real-world examples.*

A: Similar levels of ethnic tension in both cases, but only one resulted in civil conflict.

*Q: Which cases would you use to conduct an MDSD on the link between ethnic tensions and civil war? Explain what criteria you would use to choose the cases. If possible, give real-world examples.*

A: Differing levels of ethnic tension in both cases, but both resulted in civil conflict.

**Single case study**: intensive study of a single country and/or case (i.e. *n*=1).

* Example: Mamdani (2001).
* Researchers often use qualitative data.

**A single country can be divided into many cases/observations:**

* Time: historical period or years/months/days.
* Space: sub-national political units.
* Level of analysis: state, groups, individuals.

**Researchers conduct single case studies in order to:**

* Classify cases.
* Provide contextual description (aka ‘thick description’).
* Generate hypotheses.
* Test theories:
  + Most likely study: used for theory-infirming.
  + Least likely study: used for theory-confirming.
* Explaining ‘outliers’ (cases that do not conform to theoretical expectations).
* Conduct process tracing: use contextual/qualitative materials to test whether a causal process is evident or not.

**Limitations of single-case studies:**

* Limited scope or **generalisability** of results.
* **Selection bias**: intentionally choosing a case that favours your theory. This violates the scientific principle of using random samples, therefore your choice should not be related to the outcome otherwise you are likely to overestimate the effect of factors within the case (‘create false inferences’).
* Some of these limitations can be addressed by raising the number of observations.

**Further Reading: Landman (2007)**

# Interpreting Quantitative Literature

Stress to the students that they will not be required to undertake quantitative research. You do not even need to have a lot of knowledge about statistics or econometrics involved. However you limit yourself and cut yourself off from a lot of crucial academic work if you cannot interpret simple quantitative research. It also adds value as large-*n* studies offer unique benefits to academic pursuits.

## Characteristics of quantitative studies:

* Large-*N*.
* Empirical data
* Statistical techniques.
* Quantitative approach sees the abstract concept being operationalized into a variable in order to test hypotheses.

## Statistical Techniques

These are used to look for patterns between variables. The statistical tests selected depend on the type of data collected **and** your hypotheses.

**Correlation:**

A very popular test is the correlation. This measures the strength and type of relationship between two variables. It is measured on a scale of -1 to 1. -1 means that there is a perfectly negative relationship. 1 means that there is a perfectly positive relationship. 0 means that there is no relationship. In reality, results are unlikely to be -1 or 1. Rather, results will tend towards those extremes.

It is important to check the statistical significance of the correlation. This is determined by the p-value. Explain that p > .05 means that the result is 95% likely to be true; p > .01 is a 99% likelihood; and p >.001 is a 99.9% likelihood.

Remind students that correlation is not the same as causation. A popular example used is: people eat a lot of ice cream in summer, but ice cream does not cause summer.

**Regression/Multiple Regression**

These are two other very popular statistics. Regression analysis measures the extent to which independent variables predict the dependent variable. This is done by adding a ‘line of best fit’ to observed result on a graph. Often use the Pearson’s *r*.

**Ask the class:** If we have the DV = Satisfaction level with POL3030F, what do you think some of the IVs could be?

Some possible IVs could be: grades; lecture attendance; whether or not politics is a major; interest. The combination of these four IVs may help us to determine how satisfied people are with the course.

By using a large number of cases, Collier and Hoeffler can look for **patterns** between the onset of civil conflict and the conditions in these countries.

## Limitations:

These should have come up in all the earlier discussion of the method and the way it is done etc. but it is worth going over some of the important ones again:

* Correlation cannot establish cause – no matter how strong the correlation.
* Often sacrifice on the explanation of relationships and establishing **why** they might exist.
* Proxies – do they capture what we want them too? What does it mean if they do not?

## Terminology:

* Many students avoid truly reading quantitative work because of the technical terms.
* Briefly going over the terms such as significance levels will help them make sense of the literature.
* Go over language that may differ from paper to paper – eg. Independent variable/predictor/regressor.

# Conclusion:

Slide 36 should be edited to be relevant for your course. Use this slide to try draw together the new vocabulary and analytical skills encouraged by this lecture.

In wrapping up the lecture, it may be helpful to briefly remind students about all the different things covered by the lecture, and highlight some of the more relevant points for your course’s purposes.



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