Comparative Politics and Comparative Method

In this course even though our subject matter is public policy we are practicing comparative politics. Therefore it is important that we have a brief look at what comparative politics is and what kind of a method it employs.

Comparative Method is only one method of scientific enquiry and being a form of scientific enquiry comparative method has to possess certain characteristics.

The goal of scientific research is INFERENCE. We want to look at the world out there and after scientific research we want to be able to say something more intelligible about it. In other words we want to unearth some information which was not available before.

Inference can be of two types: Descriptive or Causal

Descriptive Inference involves observing the world and organizing the observations into a descriptive picture of the reality. (We will be making mostly this type of inference

Causal Inference involves discovering causal mechanisms from observations (X is happening because Y and Z are also happening but W is not happening)

In order to make inference science uses several methods. Methods depend on the nature of the phenomenon we investigate, availability and form of information about the phenomenon. Therefore, while we sometimes have a choice of scientific method, most of the time our choices are limited by the research subject at hand.

A) Experimental

B) Statistical (large-N, quantitative, etc.)

C) Comparative (includes but not synonymous with small-N, case studies)

There are other methods but are usually variants or combinations of these three methods.

Experimental method

The ideal form of scientific enquiry is Experimentation because experiments allow the highest possible degree of control over factors that we do not observe or are not interested in.

In experimental method subjects (participants, patients, examinees, lab specimens etc.) are randomly divided into two or more groups. This way any systematic difference between groups is avoided. On average groups are identical over all characteristics.

Then one characteristic (an independent variable) of one of the groups (experimental group) is manipulated by the experimenter while one of the groups (control group) is kept as it is. Then the characteristic of interest (dependent variable) is compared across two groups. This way any systematic difference in the dependent variable between the two groups is generated by the experimental manipulation.

Best example is clinical studies. When the effects of a drug (independent variable) are tested experimenters create two groups.

One group is treated with the real drug while the control group is treated with a placebo which has no drug ingredients of any kind.

Provided that the control and experimental groups are randomized carefully, i.e. they do not vary in other characteristics like age, gender, clinical condition etc., the observed differences in the conditions of patients (dependent variable) at the end of the experiment can be attributed to the drug.

Control Group	Experimental Group
X1=	X1 (Control)
X2=	X2 (Control)
X3=	X3 (Control)
X4 =	X4 (Control)
Z1 vs.	Z2 (Independent variable of interest

Experimental method is the ideal method for scientific enquiry because it allows making an inference that is not blurred by other factors. In other words experiment makes cateris paribus (all other things being equal) statements possible Therefore, experimentation should be used whenever possible.

The problem is,

…. only a limited number of research questions can be analyzed using experiments. This problem is especially important for social sciences where possibilities of experimentation are quite limited.

All other methods are imperfect approximations to experimentation. By sacrificing certain aspects of analysis and enhancing other aspects, statistical and comparative analysis make as reliable as possible inferences.

Statistical Analysis

In social sciences there are a few of names given to the statistical analysis : large-N studies and quantitative analysis are among the most common.

Statistical analysis is basically the mathematical analysis of a large amount of data. Specific method can vary from simple statistical tests like differences between means tests and confidence intervals to advanced econometric analysis of data.

Statistical analysis, through analysis of large datasets, approximates the random matching character of experiments.

Even though we do not have proper control vs. experimental groups we do have explicit information on various characteristics.

Statistical analysis investigates the effects of an independent variable on the dependent variable while controlling for the effects of other independent variables (e.g. regression analysis).

Controlling the effects of explicitly specified independent variables does not generate truly randomized groups but because large datasets are used results can be generalized to larger populations. In short, statistical analysis makes up for the lack of true controlled environments by using large number of cases.

Comparative analysis

Comparative analysis is the study of a small number of cases in depth and inferences are made through finding differences and similarities of the cases in comparison.Important to remember: comparative analysis is not a haphazard comparison of a small number of observations.

- First, we specify a research question and determine on the dependent variable: e.g. Size of the welfare state in a country.

- Then we identify the factors which can potentially influence the size of the welfare state in a given country.

-Once we have all the dimensions of a country we think are influential we gather detailed and in depth information on all these dimensions over a number of countries (countries we are interested in).
-All information in, we start comparing cases: In what ways do they differ, in what ways they are similar.

We have two broadly defined strategies available:

1- We can look at the cases where the dependent variable is identical and similar and investigate whether these cases are also similar in other characteristics.

2- Or, we can look at the most similar cases overall and investigate the dependent variable across these cases.

Comparative analysis makes up for the lack of randomized control by analyzing a small(er than statistical analysis) number of cases in depth and trying to identify all possible relevant dimensions.

Comparative analysis has a few problems that make life difficult for the researcher:

A) Small number of cases

B) Large number of variables

Large number of cases is a problem for all social science methods. We deal with an immensely complicated subject: human behavior and its consequences. Therefore for any given research question number of relevant variables is always quite high.

Solutions

Increase N: This is not always possible. For example if we are interested in the study of highly industrialized countries' welfare policies we have only that many cases. Increasing number of cases is not easy if we wanted to and our research question allowed it. Proper comparative analysis requires a lot of information. If someone had not compiled that info, it might be quite arduous work to collect data.

General preference regarding number of cases is: use statistical analysis if you can. Because statistical analysis allows explicit tests of hypotheses it is a more powerful inferential tool than comparative analysis. If we have enough number of cases we can quantify as many of our variables and conduct statistical analysis

Solutions

Decrease the dimensionality of data: This means that you need fewer variables to analyze. However, we do not go on deleting variables.

We merge highly related variables into one variable. This makes comparison easier and inference more reliable because even in comparative analysis we need to have enough number of cases to make inferences. If we can describe the same universe with fewer variables we can explain it with fewer cases.

Of course this does not mean that we will not scan all variables. In order to decide which variables to include as they are and which variables to combine into a single variable we need to know enough about as many variables as we can.

Solutions

Focus on the comparable cases: This is a pseudo-cheating methodology. By focusing on cases that are similar on a number of characteristics and vary on only a few dimensions we can solve the many variables problem to a certain extent.

Comparability can be increased either by finding similar cases or by analyzing the same case over different time periods. This second method assumes that the dependent variable changes with time and some of the independent variables do not. If such is the case, then we can effectively focus on those characteristics that vary over time keeping time invariant variables as constants.

Solutions

If we must, we can solve the many variables problem by focusing on the key variables only. Ljiphart calls this theoretical parsimony, a well taken approach in scientific community in general also known as the Occam's Razor: If you have two theories that explain the same phenomenon equally well, use the more parsimonious (i.e. that uses less information) theory because a simpler explanation is always more probable in universe.

The operative word here is *equally well.* When we start omitting variables we make sure that the more parsimonious model will not explain equally well. Therefore parsimony should be approached very carefully. Only those variables which seem not to explain any significant part of the dependent variable should be dropped out of analysis.

Again, parsimony does not mean laziness: we need to scan as many variables as possible and drop any variables only after we know that they do not explain the dependent variable.