

Research Methods in Political Science
Focus Questions for the First Unit

*****This guide will be a draft document until roughly a week before our exam. Changes made between the start of the unit and the test are typically minimal (generally just edits to shorten and clarify). Any changes made after the guide was first posted are noted in bold*****

Last updated on 9/20/2024

- Be able to describe and give examples that illustrate your understanding of some key terms: What is “empirical” research, and how does it differ from “normative” research, like what political philosophy often does? How do the “social sciences” differ from the humanities in what they choose to focus on? Political scientists and IR researchers are mostly interested in testing “causal” and “theoretical” models. What does that mean, and how is it different than other ways of talking about human behavior (for example, what many historians and cultural anthropologists do)?
- What does most social science do: describe, explain, or predict? (hint: the best work does all three)? What qualities make a topic a good research question in political science? (Why is most social science *not* about entirely new ideas? How in the world do social scientists—including those still in college—come up with “new” research topics?)
- What is the difference between “qualitative” and “quantitative” political science research methods? Is one approach inherently superior to the other? Why does most political science rely on quantitative methods these days (Hint: Quantitative work isn’t better; it’s different. And it also can be a lot less time-consuming because it leverages the power of statistical software and it is much easier to share quantitative data and replicate its findings)? We’ll talk about this topic in class and the research article examples, but it is also covered in Chapter 5 of your textbook.
- To help you understand key concepts, we will be applying them as we carefully review a handful of published articles in the first unit of the course. The main research methodology for all but one of these articles is quantitative. As you review each study, consider how additional qualitative work (especially interviews, focus groups, or observational research) might improve our understanding of how and why various outcomes happen.
- The first of many research articles you will be asked to read is a study by former HPU student Madison Deane (her 2024 senior thesis). This study is assigned to give you a first-look about how most studies are set up and how statistics are often used to see if one or more theories can be supported by public opinion data. Deane’s study asks how a persons’ attitudes about the causes of poverty shape their support for social policy expenditures. Specifically, she the effects of people’s believe about whether poverty should be “attributed primarily to either individual traits and choices, social structures, or factors within neither individual nor societal control.” You don’t need to recall all of the specifics of this study for the unit test, but please read it closely enough to be able to talk about it in class as an example of how researchers connect new research projects with what we already know from previous studies. Specifically: Why did the author think this topic was worth studying? What new knowledge was this author trying to produce? How important was previous research to this study—i.e., how much does she rely on previous work to theorize and measure her key variables (i.e., beliefs about the causes of poverty and support for progressive social policies)? Is it clear from her article why she measured things the way she did, and is there enough specification of how the study was conducted that someone could later come along and redo their study to see if she made any mistakes? Why did the author think an analysis of what a few thousand Americans were thinking several years ago could tell us something

useful for politicians today?

- How and why does most of the political science discipline seek to be “scientific,” and what exactly does that mean? To what extent is political science similar to the natural sciences? Are there any big differences? Why do social sciences seem to be less mature than the natural sciences? You will find it helpful to review the articles by Bond and Quale on this issue. Do political scientists think that scientific knowledge is the only kind of learning worth doing (See Bond’s first few pages)?
- When did political science start aiming to be “scientific” (According to Bond: Since its inception, but when did this approach to studying politics become dominant)? Why has political science become much more scientific and quantitative in just the last few decades? What objections do some political scientists raise about the centrality of statistical analysis in political research (and in many other professional and social science fields)? See especially the readings by Quayle and Bond. Why has the Supreme Court thus far been reluctant to rely heavily on quantitative social science and especially quantitative standards to adjudicate disputes over racial representation or whether districts have been gerrymandered in ways that dramatically discriminate against the voters of a specific party?
- How is the practice of political science typically different than the profession of political journalism? How are their methods different? How is the way they present information different? How is the substance of what they have to say different? What are some of the positive ways that political science is presently impacting the way the media covers politics? What are some of the lessons from applied political science that can help political journalists? What are some of the critiques of the “political science nerds” who have gained more influence over how the media thinks about and covers politics, especially elections?
- What are the main qualities that make social science inquiry “scientific,” and what are the main characteristics of scientific knowledge? Specifically, be able to define, explain, and give examples of: “falsifiable” hypotheses, “empirical” (vs. “normative”) assertions, and “transmissible” and “cumulative” knowledge. Why do political scientists typically report their findings as “probabilistic” explanations? What are the specific steps of the scientific method? To what extent do social scientists follow these steps in the correct order? You will find it helpful to review the first few pages of Jon Bond’s article.
- As we turn our attention to operationalization, variable measurement, and research design (i.e., the main topics covered in chapters 3, 4, and 5 in your textbook), you are asked to read three research articles—one on bribes in Mexico City, another on the 2018 Brazilian election, and a third on who supports female political leadership in Latin America. For each of these articles, be able to explain what the study’s main research question is and why each article’s authors thought that we needed to know more about their topic.
- Drawing on class material and your textbook (chps. 3 and 4), what is a “theory,” and why do political scientists typically try to develop “parsimonious” (here, this means: extremely simplified), maximally “generalizable” theories to explain outcomes rather than elaborating the most detailed explanations possible?
- Drawing on class presentations, your textbook, and the articles we are reading in this unit, be able to define and give examples of “independent,” “dependent,” “intervening,” and “control” variables. Definitions and examples for the first three of these are in chp. 3 of your textbook.
- Thinking about these same methodological concepts, consider the study, “Corruption and Inequality at the Crossroad.” What is the authors’ theory about the relationship between a person’s socioeconomic status and the likelihood of being targeted by corrupt officials in Mexico? What two research methods were used to see if the authors are right about a

person's wealth being a predictor of whether that person will be targeted for corruption? Which research method—quantitative (experiment) or qualitative (interviews)—provides the most information about exactly why poor people are more likely to be targeted? What, if any, basis is there to argue (as your professor does) that the research design in this study is perhaps too narrowly tailored and specific to urban Mexico to be generalizable as the article's title suggests? If the authors have overclaimed what the article can tell us, why was it still worth reading?

- Drawing on class material and your textbook (especially chp 4), what is a “hypothesis,” and how does it relate to a study's theory, “independent.” and “dependent” variables? Again looking at the study you were asked to read on life in Mexico City, how did the scholars “operationalize” their theory that “inequality” influences who is targeted by “corruption” in “Latin America”? In other words, how did they create a variable for their subjects' socioeconomic status, and how exactly did they measure if and how much corruption corresponded to differences in status? What was the “null hypothesis” for this experiment and why can it be safely rejected?
- In the Mexico City article, what “controls” were used by the authors to make sure that any relationship they saw between the independent and dependent variables was not “spurious”? That is, how did the author isolate the effect of the independent variables they cared about in the driver experiment?
- Students sometimes struggle with the concept of control variables. We use control variables to make sure that an independent variable is the cause of a dependent variable where there are other factors present that could be the actual cause of our outcome of interest. For instance, let's say that we are going to field a large survey in the US to test the hypothesis that cars driven by younger people are more likely to be pulled over by the police than those driven by older individuals. Rather than doing an experiment similar to the Mexico City study, we will instead ask survey respondents, “In the last 12 months, how many times were you pulled over by the police when you were personally driving a car?” Let's also assume that prior research has reported that younger people tend to have lower incomes, and poorer individuals are more likely to be pulled over by the police. We need to know if it is age (our hypothesis) or income (a confounding factor) that attracts extra police attention. If income is the real cause of getting pulled over more often, age is a “spurious” factor even though it is correlated with being pulled over. We could control for the influence of income differences by surveying a group of individuals who vary in age but who all have roughly the same income (this approach is taken in the Mexico City study and is common in small experiments). However, only looking at individuals of a certain income is not ideal because it potentially limits our study's findings to just poor, rich, or middle-income people. The more common and preferable approach to controls, especially when using large surveys, is to employ “statistical controls” with a statistical program that “isolates” the influence of age by clustering and comparing respondents by different variables. If we had a large survey with the necessary questions, we could use a statistical program to quickly cluster and compare drivers who are comparable across numerous different income ranges but who differ in age. Our hypothesis suggests that clustering older and younger people with similar incomes would show that, in each income group, the younger respondents are getting pulled over more. If we see that mostly poor people are being pulled over in each age group, we would say that age doesn't affect being pulled over once we control for a person's age.
- Drawing on class material and your textbook (Chp. 4), what characteristics make some hypotheses better than others? Is it ok to have multiple, alternative theories and hypotheses? Can they even contradict one another?
- In answering these questions, consider the research design of the article, “Did Brazilians

Vote for Jair Bolsonaro Because They Share His Most Controversial Views?" Why did the author think that studying one election in one country would be valuable for social scientists who do not care very much about Brazil? What is the unit of analysis in the study? What are the author's two main theories about why Brazilians voted for a candidate whose illiberal views were widely known? To what extent are those theories different and contradictory? What data and variables were used to operationalize the hypothesis that Bolsonaro's supporters largely voted for him because they shared his illiberal views? What variables tested the alternative theory (that it was "standard issues" that caused voting for Bolsonaro) and its hypothesis? What did the author find, and how was that different from what his previous work on the US 2016 election found?

- You were asked to read the article, "Does Religion Bias Individuals Against Female Political Leadership in Latin America?" The author cites previous studies to predict that more religious individuals, especially Catholics, might be prejudiced against female political leadership. Why specifically does the author think this might be the case, and how does he operationalize these theories with hypotheses that involve survey data? What are the study's main independent and dependent variables?
- The same article considers two "intervening" variables, theorizing that any influence individuals' religious characteristics may have on pro-male bias will depend on how religious the person's home country is and how dominant Catholicism is there. Why does the author think this might be the case, and how does the author test to see if either of these theories is right (Hint: why does he include the specific case studies of Mexico, Brazil, Chile, and Uruguay)? In the article's findings, does he accept or reject these hypotheses?
- Staying with the same study, why does the author need to include so many "control" variables to avoid finding a "spurious" relationship between a person's religious characteristics and attitudes toward women leaders? Give several examples from the article of factors that might well be correlated with both the independent and dependent variables in this study.
- Researchers typically choose to closely look at "samples" or "case studies" rather than studying everyone possibly involved in the behavior they would like to study. As discussed in Chapter 5 of your textbook, case studies are very common for scholars who study foreign politics or who want to compare policy outcomes in different types of US cities or states. Sometimes, a case study is chosen because it is supposed to be a typical/model case, and one that can be studied in close detail. Consider the specifics of the studies you read on Mexican and Brazilian politics, which claim, respectively, to be typical examples of "corruption in Latin America" and electoral support for "illiberal populists" in democratic elections. Are there any limits to how well the findings in these studies will travel to other countries or regions? In particular, what are the obvious problems with saying that a study of traffic signs and bribes in parts of Mexico City can be generalized to understand the relationship between social status and corruption throughout Latin America?
- Be familiar with case study selection strategies that purposefully select examples meant to control variables rather than to be representative samples. The two most common strategies of this type are "most-similar" and "most-dissimilar systems" research designs. As your textbook (Chapter 5) explains, the idea behind a most-similar design is to take two or more places that are very much alike except for one independent variable and one dependent variable, and to focus on how that independent variable explains the outcome. For example, the US, Canada, and the UK are all very much alike, culturally; however, they differ dramatically in how centralized their political systems and healthcare systems are. In democracies where it's easier to pass and implement laws, you find more publicly supported, universal healthcare. Conversely, a most-dissimilar design takes two or more countries that

differ in almost all ways, while sharing one independent variable and one outcome. So, scholars who study democracy have looked very closely at India and the US. While these countries have little in common, they are the world's two largest democracies and both started with elites who were deeply committed to forming stable democracies for a long phase during and after independence.

- Let's see if you can put these concepts to work with a practice scenario where you use case studies to test an argument: Assume you are trying to explain why some colleges have extremely high levels of student volunteerism in the local community while most do not. If you could only conduct research at four colleges, what criteria would guide the selection of your research sites? What kind of schools might you study if you were using "a most similar systems" study design? What kind of schools would you look at if you were undertaking a "most dissimilar systems" design?

IN THE LIKELY EVENT WE ARE RUNNING BEHIND, ALL SURVEY METHODOLOGY MATERIAL WILL BE COVERED ON THE SECOND UNIT (AND NOT THE UNIT 1 EXAM).

- When designing survey "samples" to make inferences about a larger "population," why is it important in most cases that the sample be closely "representative" of the population as a whole? When and why do researchers instead choose to use "purposive" or "convenience" samples, and what are the drawbacks to these approaches? Hint: For these questions and those in the next several blocks, concentrate your study efforts by carefully reviewing the readings available at the Pew Foundation.
- The gold standard for generating a truly representative survey sample is to use a technique that randomly selects participants. Specifically, the best survey-based studies of political, economic, and social behavior or attitudes use samples in which every person in the target population have the same probability of being included in the survey. The three most common approaches to probability sampling are: "simple," "stratified," and "cluster" samples. Why are stratified samples better than simple random samples when studying a widely distributed population? When are cluster samples used (hint: good for studying students or prisoners)?
- What is the best way to get a random sample of the nation as a whole? Why have researchers mostly stopped using RDD (random-digit-dialing cell and landlines) to build these surveys? How do they do it now? How does the Pew Foundation build its samples? Why is the Pew Foundation using a large "panel" survey to offset the massive expense of creating a high-quality probability sample by mail? Are there any other advantages to this type of panel survey?
- How do researchers use Census results, specifically the "parameters" (versus a sample "statistic") from the nation's decennial survey to make sure that their survey samples are truly representative of the nation if that's the population we want our survey to represent?
- Oftentimes, researchers use "convenience" samples (i.e., samples *not* compiled using random sampling techniques). Usually, convenience samples are used to cut costs (this, for example, was the case with the sample used in Whitt et al.'s study of polarization). What steps can researchers use to make these non-random samples work better? Hint: Researchers can compile their convenience sample with age, gender, race, urbanicity, region, and partisanship quotas that mirror population characteristics reported in better-quality population studies—including Census parameters. And, they can verify that their survey's results match those for various groups on high-quality random samples. Ideally, many questions asked of a convenience sample will duplicate questions recently administered in higher-quality samples, allowing researchers to determine if their

convenience sample differs substantially from what they would see with a random probability sample.

- What is “sample error”? Even if we were able to draw a sample where every American had an equal probability of being included, we would only be observing a portion of the population, and our results would be subject to “sampling error.” What is this error, and what is its relationship
- Even if we were able to draw a sample where every American had an equal probability of being included, we would only be observing a portion of the population, and our results would be subject to “sampling error.” What is this error, and what is its relationship to the number of individuals in the sample? What is the sampling error for a survey of 500 individuals versus 1,500 respondents? Why not talk to 4,000 or even 10 thousand people every time we sample a population (how much would those larger samples reduce the sample bias related to the probability that our sample deviates from the larger population as a function of being a sample?)
- Interpret each element in the following statement, which is similar to what is found in the notes of most surveys whose results are reported by the print media: A (completely made-up by your professor) USA Today/Suffolk University poll reported that 48.1% of Americans think that the US should undertake military action to curtail North Korea’s nuclear program. Source: Poll of 1000 registered voters taken Wednesday, October 7 through Friday, October 9m 2017. Margin of error +/-3 points, 95% confidence level.
- The Pew Foundation’s surveys sometimes include additional, larger oversamples of subgroups, such as African Americans or young people. In other surveys, Pew looks only at respondents in these groups. Why can’t reliable information about these individuals just be calculated from a typical survey’s results? Why is it generally a problem when survey results from a nationally representative survey are reported in a way that includes demographic subgroups (e.g., union members, Latinos, evangelical Protestants, African-Americans, etc.)?
- If you want to know about the distribution of views or behaviors in one of these subgroups, why is it better to use a 1000-person sample where each member of the subgroup has a roughly equal probability of being included in your sample rather than a much larger sample that has combined (that is, “pooled”) subpopulation respondents from many different surveys all asking the same questions?
- **THIS WILL BE COVERED ON UNIT 2’S EXAM:** What is “sample bias” and what is the best way to deal with it? What groups are most likely to be systematically under-represented in samples due to different response rates? What is post-hoc weighting, and where do the weights come from? Do we count the opinions of some types of survey respondents more than others? What is oversampling? Why does Pew pay people to complete surveys?
- **THIS WILL BE COVERED ON UNIT 2’S EXAM:** As the Pew Foundation explains on its website, the order and wording of survey questions can strongly influence response patterns. What is “acquiescence bias,” and why does Pew increasingly try to limit its use of Likert index questions that use a several-point “agree-disagree” format? (Pew prefers to use the “forced-choice” format).
- **THIS WILL BE COVERED ON UNIT 2’S EXAM:** What is “social desirability bias,” and how do researchers try to limit its effects on the honesty of respondents? What are some examples from Pew’s work where seemingly modest alterations in the wording of a question or its response options have led respondents to answer very similar questions in strikingly different ways? What is a “list experiment,” and what do we find when we use them (as Kight and Talev did in their examination of what American’s “public” and “private” views are a series of controversial issues)?

- THIS WILL BE COVERED ON UNIT 2'S EXAM: Why do political scientists tend to make "probabilistic" statements when discussing cause and effect and what does that term mean? Most pollsters predicted that Hillary Clinton would defeat Donald Trump in 2016. Why did

so many state polls fail to correctly call the outcome, and why is it so difficult to predict some types of elections (in particular, how do pollsters predict who a likely voter is, and why did so many organizations have problems with this in 2016)? Why did Nate Silver's organization—FiveThirtyEight—see it as quite plausible a week out from the election that Trump might pull off the upset (i.e., what specific signs did they see that a systematic underestimation of Trump support might occur)?

- THIS WILL BE COVERED ON UNIT 2'S EXAM: What factors seemed, *post hoc*, to be most responsible for how much most surveys were off in the 2016 election? How did pollsters attempt to fix these issues for the 2018 and 2020 elections? Why did polls still get things pretty wrong in 2020, again underestimating support for Donald Trump?
- THIS WILL BE COVERED ON UNIT 2'S EXAM: How and why did things improve in 2022, and how is survey research dealing with the fact that so many respondents will not answer phone or in-person surveys? What steps are researchers using to try to make 2024 surveys more accurate than 2016 and 2020, specifically with respect to the underrepresentation of Trump voters?
- THIS WILL BE COVERED ON UNIT 2'S EXAM: One of the great things about survey data on voter choice is that we can see how well our surveys are working by looking at electoral outcomes. Knowing that surveys underestimated support for Donald Trump in 2016 and again in 2020, how can we be confident that surveys on other economic and political issues aren't leaning liberal? Hint: Carefully review the Pew Foundation article on this question as well as their explanation for why recalculating estimates to (correctly) overweight Trump voters—recall, we always want to overweight types of respondents we know were underrepresented in our sample—does not change much at all about what we know about American opinion on most issues?