

POL222 Introduction to Quantitative Reasoning I

Essay Assignment 2

Instructions

Due: 11:59pm on Monday, November 9, 2015

For this assignment, you will write *a research proposal* within 1,500 words for a quantitative empirical political science research. For a political phenomenon of your interest and a causal theory to explain it, propose *a specific empirical research design* to investigate your theory. You may use the same causal theory that you discussed in Essay 1. Or you may select another topic and causal theory if you wish.

Goal

In Part II of the class, we have covered various empirical research designs to test a theory/hypothesis, and advantages and disadvantages of these research designs. By identifying an empirical research design appropriate for your theory in this essay assignment, you will have an opportunity to apply the knowledge you have gained to a political science research question in real life. By doing so, you are expected to deepen your understanding of how to conduct quantitative empirical research in political science.

Requirements

The requirements are as follows:

1. Your essay should be within 1,500 words.
2. In addition to concise yet informative introduction and conclusion, your essay should have the following two distinguishable parts: i) Theory and ii) Empirical Research Design.
3. In the Theory part of your essay, you should address the followings:
 - (1) Discuss the substantive importance of your research question: e.g., Why is it important to study your dependent variable? How does your theory, if confirmed, help us better understand politics or society?
 - (2) Your dependent variable must be a political phenomenon or a public policy-related phenomenon broadly defined. You may use either political outcomes, such as election results, or economic and social outcomes, such as economic growth rate and citizen's level of education, for your dependent variable.
 - (3) Your causal theory should focus on *one* independent variable. There may be multiple causes of the dependent variable of your interest, but you should pick and focus on a single cause in the theory you develop.
 - (4) Your theory should have a credible causal mechanism that links your independent and dependent variables.
 - (5) You need to propose a testable hypothesis based on observables. You may propose only one hypothesis and your essay should focus on it.
4. In the Empirical Research Design part of your essay, you should address the followings:
 - (1) How would you carry out an empirical test of your hypothesis? You may propose only one empirical test and your essay should focus on it.
 - (2) Your empirical research design should be either 1) a laboratory experiment, 2) a field experiment, 3) a survey experiment, 4) a cross-section observational study, 5) a time-

- series observational study, or 6) a time-series-cross-section (TSCS) or panel observational study. You should also specify a unit of your empirical study, such as an individual, a country, and an electoral district, and what types of data you would use for your empirical analysis, such as aggregate data, individual survey data, and experimental data (data collected through an experiment). You should discuss why your choice of empirical research design is appropriate to test your causal theory.
- (3) Your research design should be reasonably as *specific* and *feasible* as possible.
 - (4) You need to address whether there is any potential reverse causality or simultaneous relationships in your theory and discuss how your empirical research design may or may not address this problem.
 - (5) You should discuss what confounding variables are to be expected and whether they might cause a problem, and address how your empirical research design may or may not address the potential problems caused by confounding variables.
 - (6) If you expect that your empirical test cannot fully address the potential problems of reverse causality/simultaneity and confounding variables, you should discuss the limitation of your research design, specific cautions you would provide to readers of your research, and how you would defend your research.
 - (7) You should also discuss any other potential disadvantages of your empirical research design and how readers should interpret the results of your research in light of these disadvantages.
5. Your causal theory should be sufficiently elaborated, but the focus of this essay assignment is on the proposal of your empirical research design. As you can see in the rubric, the majority of the points are allocated to the empirical research design. You should elaborate your argument and organize your essay accordingly.
 6. You may not use a causal theory referenced in our textbook and lectures. An important goal of this assignment is to apply the concepts and methods you learn in class, which requires *original thinking*.
 7. You should avoid a very popular, big idea in political science research, such as Democratic Peace (i.e. democracies tend not to fight with each other), Modernization theory (i.e., economic development facilitates democratization), and SES model of political participation (i.e., higher income or more educated people participates in politics more frequently), since there is already a plethora of materials out there that would answer most of the questions for this essay. Again, the point of the essay assignment is that *you think thorough the problems by yourself* to apply the concepts and methods you learn.
 8. No additional research or readings are required or expected for this assignment. Instead, I would discourage you from looking for existing political science studies that examine the dependent variable of your interest. The reason is the same as above. Do not copy an empirical research design of the existing studies, but come up with your own.
 9. You should not include the results of any empirical analysis, as it is not required for this assignment. The assignment is to write a *proposal* of an empirical research.
 10. Assume that a professional researcher would conduct your proposed empirical research. You may propose a research, which you may not carry out by yourself, but a professional researcher may reasonably implement.
 11. As you write the research proposal, you need to convince your readers that your theory merits investigation, that your theory is substantively plausible, and that your empirical

research is well designed to produce meaningful results.¹ Keep these in mind as a guiding principle on how you write your essay.

Marking Rubric

The marking rubric of the essay assignment is posted on the class Blackboard site together with this document. In addition to the instructions in this document, read the marking rubric carefully, when you prepare your essay.

Format

- Your essay should be within the word count specified above. Footnotes, references or bibliography, and titles and notes of your graphs and figures may not be included in this word count.
- Your essay should have a concise yet informative introduction and conclusion.
- Sectioning and sub-sectioning are recommended to effectively organize your essay and communicate your argument to readers. How you effectively organize your essay will be part of the evaluation.
- You may use the two distinguishable parts of the essay required above, Theory and Empirical Research Design, as sections of your essay and add subsections to each as deemed appropriate. You may use different sectioning as long as it is easy to identify these two parts of your essay, which must be presented in this order. For example, you may have two sections for the Theory part and three sections for the Empirical Research Design part, but these sections must be presented in the order of Theory sections and Empirical Research Design sections.
- Your essay should use standard fonts, such as Times New Roman in 12-point font, and be double-spaced.
- The use of figures and tables is not required, but you may use them if you think it appropriate. In this case, whether they are effectively presented would be evaluated.
- Figures and tables, if any, should be placed where they are discussed. If your discussion refers to the same figure or table multiple times, you don't need to insert it every time it's referred. Placing it where it is mentioned for the first time is sufficient.
- If you use figures and tables, number them and give an informative title, such as "Figure 1. Title of the Figure" and "Table 1. Title of the Table." You should use their numbers, such as Figure 1 and Table 1, when you refer to them in your discussion.
- Use footnotes rather than endnotes, if you have something that should be stated but is not appropriate to be included in the body of your essay.
- You need to give appropriate citations and references, if you cite a passage, use ideas, or base your argument on ideas from other sources.
- You may use any citation format as long as it is consistently applied throughout the paper.

Discussion Board

There will be a forum on the essay assignment on the Discussion Board of the class Blackboard site. Please post substantive questions regarding the essay assignment on that forum. The instructor will not respond to substantive questions on the essay assignment via email.

¹ In the real world, you would need to convince the readers that your research merits *funding*.

Check the Discussion Board regularly since there may be answers to important questions, which may be critical for completing this essay assignment.

Questions on the essay assignment posted on the Discussion Board will be answered on Mondays, Wednesdays, and Fridays until the due date.

Tutorial

During Tutorial Session 5, you will have an opportunity to discuss your essay ideas with your peers. There will be an exercise to help you formulate your ideas for Essay 2, posted in advance of this tutorial session on the class Blackboard site. Complete this exercise as much as possible before Tutorial Session 5. The discussion in the tutorial session will be based on this exercise.

Office Hours

In addition to the instructor's regular office hours, there will be extra office hours held by teaching assistants. If you want to discuss or seek advice on the essay assignment, stop by during these office hours. You may visit any teaching assistant's office hours regardless of who your tutorial instructor is. Schedule and location of teaching assistants' office hours will be announced in the "Office Hours" section of the class Blackboard site.

If you want to seek advice on your essay assignment yet have schedule conflicts with all available office hours, you may send an email to the following teaching assistant: Michael Gavin at michael.gavin@mail.utoronto.ca. Please consider visiting office hours first, as the feedback of this kind may be best communicated in person. You should consider seeking advice via emails from Mike only when your schedule does not allow visiting the available office hours.

Please note that neither the instructor nor teaching assistants will be able to review your draft essay when you seek advice.

Communication with Your Classmates

To prepare for your essay, you may discuss your empirical research design with your classmates, as long as you and your peers do not write an essay on the same topic and the same dependent variable. More specifically, the acceptable form of collaboration is that you work on a different topic and dependent variable from your peers', and mutually review and critique each other's empirical research design. Discussing with your classmates if you both work on the same topic and dependent variable should be avoided as it may result in a form of academic misconduct. This is because your essays would show significant similarities to each other's, such as important parts of your essay being based on someone else's idea, or the same idea being used by both students. Please note that "(w)orking too closely with another student on an individual assignment so that the end result is too similar" is considered as an example of the academic misconduct under the University of Toronto's *Code of Behaviour on Academic Matters*.² You are asked to write an original essay of your own.

² The quotation is from "What is Academic Misconduct" at the Office of Student Academic Integrity's website: <http://www.artsci.utoronto.ca/osai/The-rules/what-is-academic-misconduct>. See "Unauthorized aid or assistance."

Assignment Submission

Your essay should be submitted to Turnitin.com. If you choose not to use Turnitin.com, please let the instructor know well before the deadline to make an alternative arrangement.

To upload your essay to Turnitin.com, please refer to:

<http://teaching.utoronto.ca/ed-tech/teaching-technology/turnitin/a-guide-for-students/>

You also need the following information:

Class ID: 10781470

Password: introquant