

Guidelines for reviews of research plans

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RPOS 517

This document provides some guidelines for your review of a colleague's research plan.

Purpose of this review

Reviewing others' work (e.g., journal articles, grants, or commissioned studies) will be an important part of your work as a scholar or professional. To prepare you for this and to practice your use of statistical methods, you will provide constructive feedback to a colleague's research plan. Between May 6 and May 13, you will produce a 2-page single-spaced review of a randomly assigned colleague's research plan. I will provide separate guidelines for this review. Your colleague will receive your anonymized review through me on May 14.

The point of this review is **not** to gain points by arguing that a colleague's work is fatally flawed. The review is also **not** an opportunity to redefine the project in a way that you would conduct it if it were your own. Rather, you should make it your priority to provide specific recommendations to make the project you're reviewing as strong as possible in order to answer the question that its author is asking. That is, after identifying potential issues that the project might be facing, provide solutions to these issues.

Requirements

Your review needs to contain the elements listed below. The review needs to be between 1.5–2 single-spaced pages. Reviews shorter than 1.5 pages are insufficient (for this assignment) and reviews should not exceed 2 pages. Your review should only list the title of the project you review, but not your name. You must **submit the review to me via Blackboard by 5pm on May 13**. After grading the review, I will forward it to the author of the research plan that you reviewed.

Elements of the review

The review needs to address the following points, and should be structured in this order:

1. Short summary of the research plan
2. Relevance of the proposed research (broader impact & intellectual merit)
3. Match between research question & proposed empirical method
4. Strengths & weaknesses of the proposed empirical method
5. Major specific comments
6. Minor specific comments (if applicable)

You should also take a look at this article for some more guidance on how to write productive reviews: Miller, Beth, Jon Pevehouse, Ron Rogowski, Dustin Tingley, and Rick Wilson. 2013. "How To Be a Peer Reviewer: A Guide for Recent and Soon-to-be PhDs." *PS: Political Science and Politics* 46 (1), 120-123.

Specific instructions

1. Short summary of the research plan

In 4-5 sentences, summarize the project's research question and the proposed answer. Use this summary to contextualize the rest of your review: what is this project about? What is it trying to achieve?

2. Relevance of the proposed research

Assess the relevance of this research using two criteria: what is the project's broader impact on social science and/or policy? And what is the intellectual merit/quality of the project? A project that re-tests a widely supported theory on a larger data set might be less relevant than a project that tests a widely

supported theory on a new phenomenon. Similarly, a project that evaluates the impact of an event that cannot be repeated elsewhere is not as relevant as a project that evaluates the impact of a particular program in a local context when that program could be implemented elsewhere.

This section should be one paragraph long and rely on the research plan's presentation of the extant literature. That is, the research plan should make a convincing point that the project is answering important questions that contribute to broader discussions. You as the reviewer judge the degree to which the research plan makes this point convincingly. If you have expertise in the issue area and find that the research plan has omitted important references that already answer the question of the proposed research, this is the place to state that.

3. Match between research question & proposed empirical method

In this section (4-5 sentences), evaluate briefly whether the research plan's proposed empirical method matches up well with the research question. If the research question is, "what causes war", and the empirical method describes characteristics of all wars since 1945, the match between question and method is not good (cf. your notes from RPOS 516 or another research design seminar).

If you have suggestions for how to improve the fit between question and method, enter them here or as a major specific comment below.

4. Strengths & weaknesses of the proposed empirical method

In this section (about one paragraph), briefly name the strengths and weaknesses of the proposed empirical method *with regard to the research question*. What does this method contribute to testing the specified hypothesis/es? Where does it fall short, what are its limitations? Is there a more appropriate method the author should use to answer their research question and test their theory?

5. Major specific comments

In this section, provide a numbered (!) list of specific comments and suggestions that extend the previous sections or that tackle other issues. What needs to be improved to make this project a better contribution? What should the author consider to provide a more convincing test of their theory?

6. Minor specific comments (if applicable)

In this section, list any minor comments the author should consider, but that are not fundamental for the project. You may omit this section if you're running out of space.

Reminder: The research process

The list below repeats the typical steps in the research process that the author of each research plan was expected to follow. Steps A and B are required for the research plans. You can use these as a "rubric" for your review to identify potential areas for improvement in the research plan you're reviewing.

These steps are adapted from material by Sally Friedman and Markus Crepez.

A. Motivation and Frontend

1. Project justification: Why is this an important topic? Why do this research? This can come in the form of a "puzzle". A puzzle can be:
 - an empirical observation that goes against, or is not readily explained by mainstream theory
 - a disagreement between two theories
 - a new phenomenon that is outside the scope of existing theory.

2. The Research Question: A “why” question asking why there is variation in your outcome variable or phenomenon. What explains different outcomes of interest?
3. Concept Definition: Define the major concept of your project. Usually this means defining your outcome variable. Be clear about this definition. Think about the extent of agreement there would be on your definition among scholars or experts. Think about possible alternative definitions and explain why yours is best. Citing that others use the same definition is one option, but the strongest case comes from a clear link between definition and research question and justification.
4. Theoretical Argument: This is YOUR take at the research question. YOU write in YOUR words. This is almost never the place for extensively referencing other work. You need to clarify how you arrive at an explanation for the variation you observe. If your theory builds on other work, you need to clearly lay out why this other work speaks to your question and what the contribution of your study is (e.g., an innovative test using new data, an improvement or clarification of existing arguments, etc.)
5. Hypotheses: What explanatory variables explain variation in your outcome variable? Be clear about the direction and type of hypothesis (positive/negative relationship, linear/nonlinear, etc.). Does your theory make any predictions about effect size? Does it make conditional predictions? What are the scope conditions?
6. Rival hypotheses: After you have completed steps 1 through 5, specify the most important alternative explanations, if any, for your outcome of interest that an expert reader would want to see addressed.
7. Keep things simple. Really understand the implications of your hypotheses before you move on.
8. Remember, this is a process and your thinking will evolve as you work through these steps and receive feedback.

B. Research Design

1. What type of research design is best suited for your project? Remember that qualitative and quantitative methods are not mutually exclusive. For this class, your project requires a quantitative test. But there is a variety of methods among quantitative tests that you’ve encountered: experiments, inferences from observational macro-data, inferences from survey data, etc.
2. Operationalization and measure of major concepts. Consider reliability, validity and level of measurement. Develop appropriate measures of concepts and justify why they are good measures.
 - Here, you have to be **completely precise** about the measurement and sources of your variables.
 - Generic terms such as “foreign aid” or “political information” are not sufficient.
 - Explain precisely how the variable is measured (in what units, etc.) and where it comes from (publicly available data, your coding, etc.)
3. Sampling and temporal-spatial coverage of your data.
4. Other concerns that come up in designing your project.
5. Description of the appropriate/planned statistical test of your hypothesis/es. This section needs to clearly express the implications of your hypothesis for this specific statistical test. What size of the parameters of the statistical test would support your hypothesis? What parameter values would lead you to reject your hypothesis?
 - A difference-of-means test might be appropriate if rival hypotheses and confounders can be accounted for by randomization in an experiment.
 - Focusing on the central topics of this course, the most likely test to use is multiple regression.

- Write out the mathematical expression of (a) your hypothesis/hypotheses and (b) the regression equation (if you use regression).