

Guidelines for the Research Paper

The research paper for this course is written in three sections: theoretical essay, literature review, and data analysis. Each section will be read and graded separately. We may invite you to rewrite one or more parts of the paper (for a re-grade or just for learning). The three sections will be combined and integrated at the end of the semester to create the complete research paper.

This handout presents a calendar and overview for the entire project, gives some tips on choosing a topic, describes each of the three sections individually, and offers some pointers on how to combine the three sections into a final paper. All page counts assume double-spaced lines, one-inch margins, and 11-point type.

Calendar and overview

- September 11 (noon) **Paper proposal** due. Explain your intended research topic. *Be as specific as possible.* 1 page.
- September 14-25 Appointments with TAs and instructor to discuss proposal and theory section.
- October 2 (noon) **Theoretical essay** due. State your topic as a question. Define unclear or ambiguous terms. Break the topic down into its components. Explain the logical relationships or causal pathways between various parts of the problem. *Be analytical and imaginative.* 4-5 pages.
- October 20 (Midterm) Theory section returned with grade and comments.
- Oct. 26 – Nov. 6 Appointments for two purposes:
(a) You may re-write the theory section to boost your grade by as much as 5 points (strongly recommended if your score is less than 45 points). Submit revised essay in person for re-grading during office hours of instructor or TA.
(b) Discuss data section.
- October 30 (noon) **Literature review** due. Discuss your specific topic in relation to what others have written or said about it. Use the structure of your theoretical essay to organize your discussion of the existing literature. *Be diligent and respectful.* 3-4 pages.
- November 12 Literature section returned with grade and comments.
- November 13 (noon) **Data analysis** due. Give evidence to support or refute some particular aspect of your problem. The data can be taken from another source (original or secondary), or you may collect them yourself. In any case, the presentation of the data must be original (i.e., no reproductions of graphs or tables from other works). *Be neat, precise, and creative.* 4-5 pages.
- Nov. 16 – Dec. 4 Appointments to discuss entire paper.
- November 24 Data section returned with grade and comments.
- December 9 (noon) **Final paper** due. Combine revised theory, literature, and data sections. Literature review should be incorporated into the theoretical discussion. Add introduction, transitions, discussion, and conclusion. *Be a friend to your reader, and be proud of your work!* 12-15 pages.
 Wednesday

Choosing a topic

First and foremost, choose a topic that interests you. The only restriction is that it must be sociological and/or demographic, meaning that it must deal with some aspect of human society or population. Beyond that limitation, you can choose almost any topic you want (although all topics must be approved in advance by your TA or the instructor). You can analyze the characteristics of large groups or explore patterns of individual behavior. You can choose a topic just for intellectual curiosity or because of its relevance to public policy.

Thus, you have almost unlimited freedom in choosing a topic. A word to the wise, however: choose sensibly! Find a research topic that is “doable.” The most difficult part to accomplish in the space of less than a semester is the data analysis, especially if you collect your own data or use primary sources. As you develop an idea for a topic, keep the endpoint of the project in mind. While writing the theoretical essay, think ahead to the data sources you will employ to illustrate some aspect of the problem that interests you. Ideally, the data you present should resolve a key empirical question that emerges from the theoretical analysis.

A word about originality: Obviously, the best research is original. This means that you define an important problem, identify some missing component of the discussion, and contribute to filling in the pieces. As a result of the research, some critical aspect of society is better understood, or some myth is shattered. Ideally, we should strive for that kind of originality with this project. In reality, however, you have only a short time to complete this paper. Some of you may gather new data and make a truly original contribution to the subject you explore. Most of you will strive for originality mainly in your presentation of the topic. To begin with, your theoretical essay will explore the structure of the problem in an original way. **The data section may or may not contain original data, but it must include only original presentations of data (i.e., no reproductions of graphs or tables from other works).**

Theoretical essay

The theoretical essay should begin by stating the question you wish to investigate. It should not be a simple empirical question like, “Do women live longer than men?” Rather, it should be an interesting and provocative question like, “Why do women live longer than men?” or “Do typical male behaviors contribute to men’s shorter life expectancy?” The question should be accompanied by a short paragraph that describes your motivation for asking it. State briefly why the answer to the question matters, not just to you personally but to other people as well.

Unclear or ambiguous terms should be defined near the beginning of the essay. In our above examples, there is no need to define “women” or “men,” since these terms are well defined. On the other hand, what does it mean for women to “live longer”? Does this mean that all women live longer than men? Are we comparing the longest-lived woman to the longest-lived man? No, more likely, we are talking about average life span or life expectancy, but these sorts of issues should be clarified if there is a reasonable chance for confusion in the mind of the reader. Obviously, a phrase like “typical male behaviors” would need to be defined as well.

Stating the question, motivating the topic, and defining terms should occupy only a small part of the theoretical essay (less than one page). The bulk of the essay should analyze the logical structure of the problem, speculate about causal mechanisms, and describe the social conditions that may affect the outcome in a positive or negative direction. For example, the “typical male behaviors” contributing to shorter life might be categorized according to whether they involve work (occupational hazards, stress, etc.), personal habits (smoking, drinking, etc.), or recreation (sports cars, football, etc.). The possible pathways linking cause and effect should be described. For example, high-stress jobs may encourage the development of heart problems and lead to premature death. Therefore, a society in which men are over-represented in positions of power and responsibility should exhibit a larger gap between male and

female mortality (especially deaths due to heart disease) than a more equitable society, all other things being equal. Such reasoning can help you to develop empirically testable hypotheses (see below).

This core section of your theoretical essay should reflect an appropriate degree of uncertainty on your part. Do not make statements of fact about things you have not verified. Use words like “may,” “might,” “could,” and “should” to express your uncertainty on points of fact or causality. Note two examples of this practice in the above paragraph: “high-stress jobs *may* encourage ...” and “a society in which men ... *should* exhibit”

The theoretical essay should conclude with some ideas about empirical findings that could resolve some of the uncertainties of fact or causality that you have described. To complete the discussion about on-the-job stress, for example, we might compare countries or populations in which power and responsibility in employment are more or less equitably distributed among men and women. If the explanation given above were true, in countries where women and men participate more equally in the labor force, mortality differentials should be smaller, but where women and men occupy different sectors of the economy (and men are concentrated in the high-stress sectors), the opposite should occur. This kind of reasoning sets the stage for analyzing some data in the third section of the paper. As a means of guiding the eventual data analysis, end the theoretical essay with a specific empirical question that you will seek to answer. For example, “Do countries or populations where participation in the labor force is more equitable among men and women have smaller mortality differentials by sex?”

Here are some specific comments based on the experiences of students in previous years:

- Rhetorical questions. The theoretical essay begins with a single, broad question. However, you should avoid asking sequences of rhetorical questions in the text of the paper. Rather, you should state what may be happening and why. The theoretical essay also ends with an empirical question or questions. A specific, empirical question can be helpful as a means of illustrating the sorts of data that would help to resolve disputes of fact or to distinguish between contrasting theoretical perspectives. However, in developing the discussion, you should first explain what may or may not be happening using declarative statements. As a concluding remark only, you should pose a question or questions whose answer(s) would fill in some missing piece(s) of the theoretical discussion.
- Definitions. You should define only key terms in your question or analysis. Do not define a term if it is already well defined, such as “the city of Oakland.” Also, define phrases rather than single words, if appropriate (for example, “cycle of poverty,” rather than “cycle” and “poverty”).
- Tone. Use words like “may” and “might” liberally in the theoretical analysis. Be cautious about phrases such as “it is obvious that ...” or “everyone knows that” Do not presume to know the “truth” about the many difficult and controversial topics that you are considering in these papers.
- Focus. The theoretical analysis begins with a broad question that defines the research topic. Keep this question in mind as you develop your theoretical framework. If a topic is not pertinent to answering the main research question, leave it out of the discussion.
- Spelling and usage. Learn the difference between “effect” and “affect,” and between “amount” and “number.”
- Theoretical contrast. Make sure that your theoretical analysis includes some diversity of perspectives. Do not begin by stating what you wish to prove. Set up the discussion so that there is a diversity of legitimate perspectives. The purpose of the data section will be to provide evidence that favors one or another view of your topic. In general, the purpose of a research paper is not to persuade your reader that you know all the answers, but rather to define the relevant points of controversy and to seek information that helps to choose among competing points of view.

Literature review

The purpose of the literature review is to review what others have said before you about the topics discussed in the theoretical essay. Depending on your topic, you will probably not be able to cover everything that has ever been written on the subject, but you should identify and discuss in detail the existing literature related to your major points (specifically, those that are most central to the topic as a whole, or most closely related to the eventual data analysis). Choose any standard citation and bibliographic style that you like, but follow it consistently.

Here are some specific pointers:

- Keep your broad question in mind while writing the literature review. Continually ask yourself, how do these sources relate to my original research question? Will the connection be clear to the reader?
- Organize by substance, not by citation. Do not write an “annotated bibliography,” where you simply summarize a few articles somehow related to your topic. Rather, discuss the literature directly in relation to the causal mechanisms described in the theoretical essay, following the structure of this previous section. This will make it easier to weave these two sections together in the final paper.
- Be selective, but justify your selectivity. You do not need to cite literature on every causal mechanism in your theoretical essay. However, you *must* discuss literature on the factors you think are most important and that you will be examining in your data analysis. If you ignore or downplay the literature on secondary factors, briefly state why the choice was appropriate.
- Try to answer the following questions in your literature review:
 - ☆ What is known? What are the issues that writers on your topic agree on and take as fact?
 - ☆ What is in dispute? What are the debates? Who takes which positions?
 - ☆ What is unknown? What are the questions for further research posed by the authors? Which questions have not been sufficiently answered that you may be able to answer yourself?
- Use the literature review to confirm the assumptions underlying your research question. Reread your theoretical essay with the following question in mind: Is there anything that I *assume* rather than seek to explain? You must deal with these assumptions first, or the rest of the paper will be flawed. A literature review can be an effective way to back up your assumptions. Some examples:
 - ☆ Before discussing *why* teen pregnancy is declining, make sure that this is actually happening and that the research community is in agreement about the trend itself.
 - ☆ You want to determine whether multinational corporations are creating unsustainable fishing practices. Are you assuming (implicitly) that traditional fishing practices are sustainable? If so, you would want to cite research from anthropology or environmental studies to back it up.
 - ☆ You want to explain why racial groups in the U.S. have different rates of heart disease. Before you can explain the “why,” you first need to document the “what.” This could fall into the literature review or the data section, depending on whether you simply summarize the findings of previous studies, or present data in a creative way (for example, by plotting trends in mortality from heart disease over time, using data that you have compiled from different sources).
- Try to situate your work in relation to work by other authors. Your paper will be more effective and interesting if you conclude by taking a position within an existing theoretical debate, because this provides tension and controversy. If you can, think about the main point of your final paper. What is your central argument going to be? How does that argument relate to the existing literature?
- Rhetorically, you may find it easier to write the literature review if you compare and contrast several existing theories. Apply a critical lens to the literature you review both theoretically and methodologically. State which arguments or results you find most (un)convincing and why.

- Use the literature review to support or refute particular explanations contained in the theoretical essay, and/or to find new explanations you had not thought of but need to consider. Some examples:
 - ☆ Support an existing theory. Your theoretical essay suggests that income and health insurance may be key factors determining whether a woman has access to birth control. You would want to see if there are existing studies that confirm this causal connection.
 - ☆ Discount certain theories. Arguably, class size (i.e., number of students per teacher) is not the major issue in student achievement, and other issues are more important. You might wish to review and criticize the research design of studies that purport to demonstrate the importance of class size *per se*.
 - ☆ Describe existing controversies. You do not need to have a favored theory, or you may find that your initial explanation was wrong. Review opposing theories and discuss how you could try to test which one is most convincing.
 - ☆ Demonstrate a “gap in the literature.” Suppose you know that Latinos in the U.S. visit modern medical facilities less often than other groups, and you suspect that patterns of utilization are influenced as much by cultural dispositions and attitudes toward modern medicine as by access to care through health insurance or other means. You may find that you agree in part with existing studies that demonstrate the importance of access to care, but perhaps no one else has integrated the role of culture into a comprehensive explanation of the phenomenon. You could review the existing studies to show that your analysis is unique in its manner of taking culture into account.
 - ☆ Extend a general theory onto new empirical ground. Suppose you deploy the theory of cultural capital (associated with the late French sociologist Pierre Bourdieu) as a possible explanation for observed differences (in some indicator of well-being or life circumstances) between immigrants who come to the U.S. primarily to obtain a university education and those who come for other reasons. You could describe and discuss the concept of social capital and talk about its relevance for explaining the characteristics of education-bound immigrants.

Data analysis

The data section of the paper must include an original presentation of data (typically in the form of graphs or tables) to illustrate some central point(s) from the earlier parts of the paper. In particular, it should answer, at least partially, the specific empirical question that concluded the theoretical essay. You may gather original data through interviews, observation, etc. Or, you may collect raw data from primary sources, like surveys, a population census, vital statistics, administrative data, archival materials, etc. Finally, you may obtain data from secondary sources, such as published works that analyze and present the data already.

For some of you, the sources of information for the literature review and the data analysis may overlap. However, remember that in the data section you must present the evidence in a creative manner involving graphs, tables, or other displays (i.e., not a mere narrative discussion of findings). **Direct reproductions of data presentations from other works are not allowed.** If you extract data from an existing table or graph, you should select only those numbers that are needed for your discussion and create an appropriate and original display. All graphs and tables should be well labeled, including an indication of the source of the information.

In addition to an original presentation of data, this section should contain a narrative description of all graphs, tables, and other displays. This narrative should explain the origins of the data and the method of presentation (if not obvious). The connection between the empirical results being presented and the earlier theoretical essay and literature review should be developed in the course of the discussion.

Here are some specific points to keep in mind:

- What specific empirical question(s) is(are) being answered by the data analysis? How does the data analysis address the original questions of the theoretical essay? What are possible outcomes or patterns that could have been observed in the evidence being presented? Why are the observed outcomes significant? Does the evidence help to distinguish between competing theoretical perspectives discussed previously?
- What are the sources of your data, and what methods were used in gathering it? Are the data reliable? Could they be flawed in some way? Might these flaws invalidate your conclusion(s)?
- Present the data well. Headings for graphs or tables should answer the questions of who, what, where, and when. Axes and lines of graphs, and rows and columns of tables, should be clearly labeled. Make sure that the scale and units of analysis are clear. If you are citing statements made during an interview (another form of evidence), make sure that quotation marks indicate clearly who made each statement.
- Make sure that your narrative description of the data is well organized and analytical:
 - ☆ What story do the data tell? How do the data confirm or disprove hypotheses discussed in the other sections of the paper?
 - ☆ Relate the data section to the literature review. How have you contributed to the literature? After your research, what remains known and unknown? How do you situate yourself within controversies or gaps in the literature after having done the research?
 - ☆ What are the limitations of your results? What can you *not* conclude from the findings? Be especially careful about not confounding causation with correlation.
 - ☆ If possible, include suggestions for further research. By way of conclusion, state how, given more time and resources, you could redesign your research to answer these questions more definitively.

Final paper

The three sections written previously should be combined to form the final research paper. The theoretical essay and the literature review should be merged to improve the flow of the paper as a whole. The introduction of the paper can be based on the original question and the discussion of its importance. Key terms should be defined early on. The theoretical framework should be introduced and then developed piece by piece. The tone of this section should reflect the fact that it is a combination of the theoretical essay and literature review: at times you will speculate about the topic in an imaginative way, and at others you will report on what is known and what has been said or argued before. This integrated theoretical discussion will comprise more than one half of the paper, and it will set the stage for the presentation of empirical results in the last part of the paper. After these results are presented and discussed in light of the original question and the theoretical framework, you should add a short conclusion to state succinctly what has been learned from the analysis, what is left unresolved, and how additional research might advance our understanding further.