

GUIDELINES FOR PROPOSALS: QUANTITATIVE RESEARCH

Human Development and Family Studies

Overview:

The following guidelines are not dogma. Using the guidelines, work with your advisor to create a format that works best for your thesis or dissertation proposal. Your advisor may want to vary the sections included in the proposal, the order of sections, page limits, or the placement of material in sections. In general, however, the logic of the proposal does not vary.

Organize the sections of your research proposal to answer the following questions:

1. Statement of the problem (sections A & B): What do you intend to do, and why is the work important?
2. Review of the literature (sections C, D, & E): How does your study fit in with previous research and theory in the area? What are your research questions and hypotheses?
3. Methods (sections F & G): How and when are you going to do the work?

Overall, ask yourself: Is there enough detail? Does the proposal flow logically from section to section? Include sufficient information in your proposal so that the reader can evaluate your work without reference to any other source. Be specific and informative and avoid redundancies. Reviewers appreciate brevity and clarity of presentation. Your proposal should be no longer than 40 double-spaced pages. Use APA format; this includes the use of non-sexist language.

STATEMENT OF THE PROBLEM

- A. Specific Aims. State concisely and realistically what the research described in your proposal is intended to accomplish. Detail the aims of the study. Be clear about what is included (and, by implication, what is left out). Focus on specific products or end-points of the current project; temper your goal to save the world. This section should not exceed 2 pages.
- B. Significance. Briefly sketch the background to the present proposal, critically evaluating existing knowledge in summary form, and specifically identify the gaps that your project is intended to fill. Try to include a specific statement of the problem either in a sentence or two or in question form (e.g., In what ways do distressed and nondistressed couples differ in the structure of their social interaction?). You may have more than one general research question.

You may address significance in terms of one or more of the following:

- 1) filling in a gap in previous research;
- 2) theory (testing, expanding or qualifying previous theories, or building new theory);
- 3) solutions to social needs or problems;
- or 4) methodology (creating, refining, or extending an instrument or analysis procedure).

State concisely the importance of the research described in your proposal by relating the specific aims to the longer-term implications of your research problem. This section should not exceed 2 pages.

REVIEW OF THE LITERATURE

- C. Pilot or Preliminary Studies. If you are continuing an ongoing project, or are part of a larger research project, summarize the previous work on the project. Demonstrate how your study contributes to the aims of the overall project.

Typically, pilot studies are used to try out certain procedures--new measures, questionnaire formats, coding schemes, techniques for recruiting a sample, and so on. Pilot work improves any research project. There is nothing more convincing to your committee than to say, "I tried it, and this is how it worked." Have you tried out your interview on a pilot sample? If you developed a measure, have you given it to a pilot sample? What have you learned from your preliminary studies that builds reviewers' confidence in your project?

NOTE: This section will not be included in all proposals. Also, instead of putting this information in a separate section, you may want to integrate it into your literature or methodology section. Use the information where it is the most convincing.

- D. Related Research and Theoretical Rationale. Science is cumulative. In this section, you must place your research questions, concepts, and hypotheses in the context of previous work. Discuss your proposed study in relation to previous research. Indicate how your study will expand and extend knowledge about your content area. Describe how your study fits into the continuing dialogue in your area of research. In the context of previous research and theory, what is the unique contribution of your study? How does previous research and theory justify your research questions, concepts, and hypotheses? Clearly describe the theoretical or conceptual basis for your study.

Organize your review thematically with headings for each theme or subtheme. Headings help you organize your thoughts and help the reader follow your reasoning. Also, material does not overwhelm the reader if you use enough headings. If you are not able to break down your review into sections with headings, then you have not thought about the material long enough.

What is the theoretical or conceptual base for your study? Have you described your theoretical foundation clearly and indicated its relation to your research problem? Exactly what concepts and propositions have you taken from the theory or conceptual framework? How does your study test theory or contribute to its extension in some way?

Summarize the pertinent research. Have you examined primary as well as secondary sources? If a study is important, you must read the primary source rather than rely on someone else's summary or review of that work. You should not cite a reference unless you have read it. Have you selected and reviewed the literature that most directly bears on your research problem? Do you include the most recent literature in both content and method? Demonstrate a mastery of the relevant literature in the field. Cite works that explain and legitimate your research questions, major concepts, hypotheses, and methods. Your task is to review the literature selectively. Use the research literature to support and explain the choices you made for your study, not to show that you have read every book and article in your research area. If you insist on a comprehensive literature review of a problem area, be clear about where your project fits into this greater scheme. If there is little literature bearing on your research problem, have you indicated the studies closest to the problem? Do you demonstrate that you have made a scholarly attempt to find relevant previous research?

Synthesize the previous research. Do not organize your review study-by-study or paper-by-paper. That is, do not have a paragraph that summarizes Smith (1990), followed by a paragraph that summarizes Jones (1992), and on and on. Integrate material so you can draw conclusions across studies. Some studies are so important that you will need to cover them in greater detail one-at-a-time. You should have no more than five studies that deserve such attention. The other material should be presented by integrating studies together to support your general conclusions.

Critically evaluate the previous research. Is there consistency or inconsistency across studies? Can you explain any inconsistencies? Are there gaps in the knowledge or limitations in previous conceptualizations? Are there problems with measurement, data collection, sampling, or interpretation of results? Point out what will be distinctive or different about the proposed research compared with previous research. Have you indicated how you will avoid their flaws?

In their book, Proposals that work (1987, p.67), Lawrence Locke and his coauthors offer the following guidelines for evaluating your review of the literature. To assure yourself that your review is complete, mark your manuscript where you have answered the questions below. The first six questions are from Locke, and we added a seventh:

1. Is there a paragraph outlining the organization of the related literature section?
2. Do you have headings and subheadings that represent your most important topics and subtopics?
3. Is the relation of the proposed study to past and current research clearly shown in your summary paragraphs?

4. What new answers (extension of the body of knowledge) will the proposed research provide?
 5. What is distinctive or different about the proposed research compared with previous research? Is this clearly stated? Is this introduced in the first few paragraphs?
 6. What are the most relevant articles (no more than five) that bear on this research? Are these articles presented in a way that denotes their importance? Has the evaluation of these key articles been presented succinctly?
 7. Is the connection between your discussion of theory and your review of the literature clear?
- E. Questions and Hypotheses. If there is a basis for predictions and your study involves hypotheses, they should flow logically from your general problem statement and your review of the literature and theory. A common problem with proposals is that the research questions and hypotheses do not flow from the discussion of theory and the review of the literature. If your research is exploratory and does not involve hypotheses, you should present a series of specific questions to be answered by your study. These questions should also flow logically from your general problem statement and your review of the literature and theory. You may find it easier to integrate your research questions and hypotheses into your literature review rather than present them in a separate section. If you have not already done so in the above sections, conceptually define all the variables in your hypotheses or specific research questions.

NOTE: Many advisors prefer that you have your discussion of the theoretical foundations of your project in a separate section from your literature review. Remember, however, that the connection between the two should be clear.

METHODS

- F. Methods. The purpose of this section is to tell the reader how you will achieve your specific aims. Overall, use the criterion of replicability. It should be possible for another investigator to reproduce your research, to reanalyze the data, and to reach similar conclusions about the adequacy and appropriateness of methods and data collection. Be thorough, but succinct. This is the most important section of the proposal. The methods section constitutes a "contract" between you and your committee. Once your committee approves of this section, you can be assured that, if you carry out the project as you have proposed, you will have upheld your end of the contract.
1. Population and Sample. Describe the population from which you will draw your sample, the method of sampling, and the rationale for the sampling method. What is the target sample size? Indicate what controls by stratification or other means you will employ. You may want to ask yourself the following questions:

Is the generality implied by your sample consistent with the generality you led the reader to expect by your problem statement?

Is your sampling unit (e.g., individual, dyad, whole families) consistent with your problem statement and hypotheses?

Have you justified your sample size? Have you accounted for response rates, drop-outs, and so on?

Is your sampling plan consistent with the statistical procedures you plan to use? Do you have a large enough sample to do the analyses you propose to do?

If you plan to use a convenience sample, have you justified this choice? How will the choice of a convenience sample limit your ability to generalize your results?
 2. Choice of Methodology. This section includes a description of your research approach--experimental, survey, observation, combination of survey and open-ended interviews, etc. What are the strengths and weaknesses of this methodological approach given your specific aims and research problem? Convince the reader that you have chosen the most appropriate methodological approach. For example, if your question is developmental, attend to the issues involved in your choice of design--cross-sectional, longitudinal, and other developmental designs.

If you are doing an experimental design, indicate how you will assign individuals to groups. If your assignment is other than random, be sure to justify your procedures.

3. Data Collection. This section includes instructions to participants, interviewers, observers--whatever is appropriate. How will you distribute questionnaires, record observations, etc.? Describe the context of the research. Have you considered the reactivity of your participants to the research context? Describe any pilot work you may have done or plan to do.
 4. Measurement. Operationally define all variables under study--i.e., how are you measuring your variables? How will you come up with a score for every variable in your study? If you are using someone else's measure, reference it and provide any available evidence about its reliability and validity. If you plan to develop your own measures, describe your procedures for doing so and give sample items. How do you plan to assess reliability and validity? Have you done any pilot work with your measures?
 5. Data Analysis. What statistics do you plan to use? Make it clear how your analyses are connected with your research questions and hypotheses. What assumptions underlie your statistical analyses, and how will you determine whether the assumptions are met? Are your statistics appropriate for your level of measurement--nominal, ordinal, interval, or ratio? Are your statistics appropriate for your sample characteristics?
 6. Limitations of the Study. Cite any weaknesses in your study--sampling, measurement, etc. Don't belabor the weaknesses; simply state what qualifications might need to accompany the conclusions of your study.
 7. Ethical considerations. What are the ethical issues involved in your study? What are the potential risks and benefits to your participants? How will you protect your participants from risk? If you need an informed consent, include a copy in your proposal. Your advisor has a copy of the procedures and forms of the Institutional Review Board.
- G. Work Plan. Indicate in chronological order the length of time required for each major aspect of your study. A diagram or time line may be the best way to display this information. That is, draw a line, mark dates on the line, and indicate what your research activities will be at any given time. Do you have a clear idea of the sequence of your research process? Is your timing realistic? Is there sufficient time to do pilot work, collect data, analyze data, draft your thesis or dissertation, etc.?

REFERENCES

Remember to use APA style.