THE ELEMENTS OF A PROPOSAL

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I. Introduction and Theoretical Framework

A. "The introduction is the part of the paper that provides readers with the background information for the research reported in the paper. Its purpose is to establish a framework for the research, so that readers can understand how it is related to other research" (Wilkinson, 1991, p. 96).

B. In an introduction, the writer should

1. create reader interest in the topic,
2. lay the broad foundation for the problem that leads to the study,
3. place the study within the larger context of the scholarly literature, and
4. reach out to a specific audience. (Creswell, 1994, p. 42)

C. If a researcher is working within a particular theoretical framework/line of inquiry, the theory or line of inquiry should be introduced and discussed early, preferably in the introduction or literature review. Remember that the theory/line of inquiry selected will inform the statement of the problem, rationale for the study, questions and hypotheses, selection of instruments, and choice of methods. Ultimately, findings will be discussed in terms of how they relate to the theory/line of inquiry that undergirds the study.

D. Theories, theoretical frameworks, and lines of inquiry may be differently handled in quantitative and qualitative endeavors.

1. "In quantitative studies, one uses theory deductively and places it toward the beginning of the plan for a study. The objective is to test or verify theory. One thus begins the study advancing a theory, collects data to test it, and reflects on whether the theory was confirmed or disconfirmed by the results in the study. The theory becomes a framework for the entire study, an organizing model for the research questions or hypotheses for the data collection procedure" (Creswell, 1994, pp. 87-88).
2. In qualitative inquiry, the use of theory and of a line of inquiry depends on the nature of the investigation. In studies aiming at "grounded theory," for example, theory and theoretical tenets emerge from findings. Much qualitative inquiry, however, also aims to test or verify theory, hence in these cases the theoretical framework, as in quantitative efforts, should be identified and discussed early on.

II. Statement of the Problem

A. "The problem statement describes the context for the study and it also identifies the general analysis approach" (Wiersma, 1995, p. 404).

B. "A problem might be defined as the issue that exists in the literature, theory, or practice that leads to a need for the study" (Creswell, 1994, p. 50).

C. It is important in a proposal that the problem stand out—that the reader can easily recognize it. Sometimes, obscure and poorly formulated problems are masked in an extended discussion. In such cases, reviewers and/or committee members will have difficulty recognizing the problem.

D. A problem statement should be presented within a context, and that context should be provided and briefly explained, including a discussion of the *conceptual or theoretical framework* in which it is embedded. Clearly and succinctly identify and explain the problem within the framework of the theory or line of inquiry that undergirds the study. This is of major importance in nearly all proposals and requires careful attention. It is a key element that associations such as AERA and APA look for in proposals. It is essential in all quantitative research and much qualitative research.

E. State the problem in terms intelligible to someone who is generally sophisticated but who is relatively uninformed in the area of your investigation.

F. Effective problem statements answer the question "Why does this research need to be conducted." If a researcher is unable to answer this question clearly and succinctly, and without resorting to hyperspeaking (i.e., focusing on problems of macro or global proportions that certainly will not be

informed or alleviated by the study), then the statement of the problem will come off as ambiguous and diffuse.

G. For conference proposals, the statement of the problem is generally incorporated into the introduction; academic proposals for theses or dissertations should have this as a separate section.

III. Purpose of the Study

A. "The purpose statement should provide a specific and accurate synopsis of the overall purpose of the study" (Locke, Spirduso, & Silverman, 1987, p. 5). If the purpose is not clear to the writer, it cannot be clear to the reader.

B. Briefly define and delimit the specific area of the research. You will revisit this in greater detail in a later section.

C. Foreshadow the hypotheses to be tested or the questions to be raised, as well as the significance of the study. These will require specific elaboration in subsequent sections.

D. The purpose statement can also incorporate the *rationale* for the study. Some committees prefer that the purpose and rationale be provided in separate sections, however.

E. Key points to keep in mind when preparing a purpose statement.

1. Try to incorporate a sentence that begins with "The purpose of this study is . . ." This will clarify your own mind as to the purpose and it will inform the reader directly and explicitly.
2. Clearly identify and define the central concepts or ideas of the study. Some committee Chairs prefer a separate section to this end. When defining terms, make a judicious choice between using descriptive or operational definitions.
3. Identify the specific method of inquiry to be used.
4. Identify the unit of analysis in the study.

IV. Review of the Literature

A. "The review of the literature provides the background and context for the research problem. It should establish the need for the research and indicate that the writer is knowledgeable about the area" (Wiersma, 1995, p. 406).

B. The literature review accomplishes several important things.

1. It shares with the reader the results of other studies that are closely related to the study being reported (Fraenkel & Wallen, 1990).
2. It relates a study to the larger, ongoing dialogue in the literature about a topic, filling in gaps and extending prior studies (Marshall & Rossman, 1989).
3. It provides a framework for establishing the importance of the study, as well as a benchmark for comparing the results of a study with other findings.
4. It "frames" the problem earlier identified.

C. Demonstrate to the reader that you have a comprehensive grasp of the field and are aware of important recent substantive and methodological developments.

D. Delineate the "jumping-off place" for your study. How will your study refine, revise, or extend what is now known?

E. Avoid statements that imply that little has been done in the area or that what has been done is too extensive to permit easy summary. Statements of this sort are usually taken as indications that the writer is not really familiar with the literature.

F. In a proposal, the literature review is generally brief and to the point. Be judicious in your choice of exemplars—the literature selected should be pertinent and relevant (APA, 2001). Select and reference only the more appropriate citations. Make key points clearly and succinctly.

G. Committees may want a section outlining your *search strategy*—the procedures you used and sources you investigated (e.g., databases, journals, test banks, experts in the field) to compile your literature review. Check with your Chair.

V. Questions and/or Hypotheses

A. *Questions* are relevant to normative or census type research (How many of them are there? Is there a relationship between them?). They are most often used in qualitative inquiry, although their use in quantitative inquiry is becoming more prominent. *Hypotheses* are relevant to theoretical research and are typically used only in quantitative inquiry. When a writer states hypotheses, the reader is entitled to have an exposition of the theory that lead to them (and of the assumptions underlying the theory). Just as conclusions must be grounded in the data, hypotheses must be grounded in the theoretical framework.

B. A *research question* poses a relationship between two or more variables but phrases the relationship as a question; a *hypothesis* represents a declarative statement of the relations between two or more variables (Kerlinger, 1979; Krathwohl, 1988).

C. Deciding whether to use questions or hypotheses depends on factors such as the purpose of the study, the nature of the design and methodology, and the audience of the research (at times even the taste and preference of committee members, particularly the Chair).

D. The practice of using hypotheses was derived from using the scientific method in social science inquiry. They have philosophical advantages in statistical testing, as researchers should be and tend to be conservative and cautious in their statements of conclusions (Armstrong, 1974).

E. Hypotheses can be couched in four kinds of statements.

1. *Literary null*—a "no difference" form in terms of theoretical constructs. For example, "There is no relationship between support services and academic persistence of nontraditional-aged college women." Or, "There is no difference in school achievement for high and low self-regulated students."

2. *Operational null*—a "no difference" form in terms of the operation required to test the hypothesis. For example, "There is no relationship between the number of hours nontraditional-aged college women use the student union and their persistence at the college after their freshman year." Or, "There is no difference between the mean grade point averages achieved by students in the upper and lower quartiles of the distribution of the Self-regulated Inventory." *The operational null is generally the preferred form of hypothesis-writing*.

3. *Literary alternative*—a form that states the hypothesis you will accept if the null hypothesis is rejected, stated in terms of theoretical constructs. In other words, this is usually what you hope the results will show. For example, "The more that nontraditional-aged women use support services, the more they will persist academically." Or, "High self-regulated students will achieve more in their classes than low self-regulated students."

4. *Operational alternative*—Similar to the literary alternative except that the operations are specified. For example, "The more that nontraditional-aged college women use the student union, the more they will persist at the college after their freshman year." Or, "Students in the upper quartile of the Self-regulated Inventory distribution achieve significantly higher grade point averages than do students in the lower quartile."

F. In general, the null hypothesis is used if theory/literature does not suggest a hypothesized relationship between the variables under investigation; the alternative is generally reserved for situations in which theory/research suggests a relationship or directional interplay.

G. Be prepared to interpret any possible outcomes with respect to the questions or hypotheses. It will be helpful if you visualize in your mind=s eye the tables (or other summary devices) that you expect to result from your research (Guba, 1961).

H. Questions and hypotheses are testable propositions deduced and *directly derived from theory* (except in grounded theory studies and similar types of qualitative inquiry).

I. Make a clear and careful distinction between the dependent and independent variables and be certain they are clear to the reader. *Be excruciatingly consistent in your use of terms.* If appropriate, use the same pattern of wording and word order in all hypotheses.

VI. The Design--Methods and Procedures

A. "The methods or procedures section is really the heart of the research proposal. The activities should be described with as much detail as possible, and the continuity between them should be apparent" (Wiersma, 1995, p. 409).

B. Indicate the methodological steps you will take to answer every question or to test every hypothesis illustrated in the Questions/Hypotheses section.

C. All research is plagued by the presence of confounding variables (the *noise* that covers up the information you would like to have). Confounding variables should be minimized by various kinds of *controls* or be estimated and taken into account by randomization processes (Guba, 1961). In the design section, indicate

1. the variables you propose to control and how you propose to control them, experimentally or statistically, and
2. the variables you propose to randomize, and the nature of the randomizing unit (students, grades, schools, etc.).

D. Be aware of possible sources of error to which your design exposes you. You will not produce a perfect, error free design (no one can). However, you should anticipate possible sources of error and attempt to overcome them or take them into account in your analysis. Moreover, you should disclose to the reader the sources you have identified and what efforts you have made to account for them.

E. **Sampling**

1. The key reason for being concerned with sampling is that of *validity*—the extent to which the interpretations of the results of the study follow from the study itself and the extent to which results may be generalized to other situations with other people (Shavelson, 1988).

2. Sampling is critical to *external validity*—the extent to which findings of a study can be generalized to people or situations other than those observed in the study. To generalize validly the findings from a sample to some defined population requires that the sample has been drawn from that population according to one of several *probability* sampling plans. By a *probability sample* is meant that the probability of inclusion in the sample of any element in the population must be given *a priori*. All probability samples involve the idea of *random sampling* at some stage (Shavelson, 1988). In experimentation, two distinct steps are involved.

   Random selection—participants to be included in the sample have been chosen at random from the same population. Define the population and indicate the sampling plan in detail.

   Random assignment—participants for the sample have been assigned at random to one of the experimental conditions.

3. Another reason for being concerned with sampling is that of *internal validity*—the extent to which the outcomes of a study result from the variables that were manipulated, measured, or selected rather than from other variables not systematically treated. Without probability sampling, error estimates cannot be constructed (Shavelson, 1988).

4. Perhaps the key word in sampling is *representative*. One must ask oneself, "How representative is the sample of the survey population (the group from which the sample is selected) and how representative is the survey population of the target population (the larger group to which we wish to generalize)?"

5. When a sample is drawn out of convenience (a nonprobability sample), rationale and limitations must be clearly provided.

6. If available, outline the characteristics of the sample (by gender, race/ethnicity, socioeconomic status, or other relevant group membership).

7. Detail procedures to follow to obtain informed consent and ensure anonymity and/or confidentiality.

F. **Instrumentation**

1. Outline the instruments you propose to use (surveys, scales, interview protocols, observation grids). If instruments have previously been used, identify previous studies and findings related to reliability and validity. If instruments have not previously been used, outline procedures you will follow to develop and test their reliability and validity. In the latter case, a pilot study is nearly essential.

2. Because selection of instruments in most cases provides the operational definition of constructs, this is a crucial step in the proposal. For example, it is at this step that a literary conception such as "self-efficacy is related to school achievement" becomes "scores on the Mathematics Self-Efficacy Scale are related to Grade Point Average." Strictly speaking, results of your study will be directly relevant only to the instrumental or operational statements (Guba, 1961).

3. Include an appendix with a copy of the instruments to be used or the interview protocol to be followed. Also include sample items in the description of the instrument.

4. For a mailed survey, identify steps to be taken in administering and following up the survey to obtain a high response rate.

G. Data Collection

1. Outline the general plan for collecting the data. This may include survey administration procedures, interview or observation procedures. Include an explicit statement covering the field controls to be employed. If appropriate, discuss how you obtained *entré*.

2. Provide a general outline of the time schedule you expect to follow.

H. Data Analysis

1. Specify the procedures you will use, and label them accurately (e.g., ANOVA, MANCOVA, HLM, ethnography, case study, grounded theory). If coding procedures are to be used, describe in reasonable detail. If you triangulated, carefully explain how you went about it. Communicate your precise intentions and reasons for these intentions to the reader. This helps you and the reader evaluate the choices you made and procedures you followed.

2. Indicate briefly any analytic tools you will have available and expect to use (e.g., Ethnograph, NUDIST, AQUAD, SAS, SPSS, SYSTAT).

3. Provide a well thought-out rationale for your decision to use the design, methodology, and analyses you have selected.

VII. Limitations and Delimitations

A. A *limitation* identifies potential weaknesses of the study. Think about your analysis, the nature of self-report, your instruments, the sample. Think about threats to internal validity that may have been impossible to avoid or minimize—explain.

B. A *delimitation* addresses how a study will be narrowed in scope, that is, how it is bounded. This is the place to explain the things that you are not doing and why you have chosen not to do them—the literature you will not review (and why not), the population you are not studying (and why not), the methodological procedures you will not use (and why you will not use them). Limit your delimitations to the things that a reader might reasonably expect you to do but that you, for clearly explained reasons, have decided not to do.

VIII. Significance of the Study

A. Indicate how your research will refine, revise, or extend existing knowledge in the area under investigation. Note that such refinements, revisions, or extensions may have either substantive, theoretical, or methodological significance. Think pragmatically (i.e., cash value).

B. Most studies have two potential audiences: practitioners and professional peers. Statements relating the research to both groups are in order.

C. This can be a difficult section to write. Think about *implications*—how results of the study may affect scholarly research, theory, practice, educational interventions, curricula, counseling, policy.

D. When thinking about the significance of your study, ask yourself the following questions.

1. What will results mean to the theoretical framework that framed the study?
2. What suggestions for subsequent research arise from the findings?

3. What will the results mean to the practicing educator?
4. Will results influence programs, methods, and/or interventions?

5. Will results contribute to the solution of educational problems?
6. Will results influence educational policy decisions?
7. What will be improved or changed as a result of the proposed research?
8. How will results of the study be implemented, and what innovations will come about?

IX. References

A. Follow APA (2001) guidelines regarding use of references in text and in the reference list. Of course, your committee or discipline may require Chicago or MLA.

B. Only references cited in the text are included in the reference list; however, exceptions can be found to this rule. For example, committees may require evidence that you are familiar with a broader spectrum of literature than that immediately relevant to your research. In such instances, the reference list may be called a *bibliography*.

C. Some committees require that reference lists and/or bibliographies be "annotated," which is to say that each entry be accompanied by a brief description, or an abstract. Check with your committee Chair before the fact.

Appendixes

The need for complete documentation generally dictates the inclusion of appropriate appendixes in proposals (although this is generally not the case as regards conference proposals).

The following materials are appropriate for an appendix. Consult with your committee Chair.

Verbatim instructions to participants.
Original scales or questionnaires. If an instrument is copyrighted, permission in writing to reproduce the instrument from the copyright holder or proof of purchase of the instrument.
Interview protocols.
Sample of informed consent forms.
Cover letters sent to appropriate stakeholders.
Official letters of permission to conduct research.

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How to cite this web page:
Pajares, F. (2007). *Elements of a proposal*. Available from the author.