

# Don't Overlook These

## Planning Research Papers 4

Certain matters need special attention so that the researcher does not overlook them and run the risk of failing to address them explicitly in the report.

1. *Basic difficulty*: What is it that has caught your interest or raised a question in your mind?
2. *Rationale and theoretical base*: Can the problem you're investigating be fitted into a structured point of view that gives definition, orientation, and direction to your thinking? In other words, can you begin from a position of logical concepts, relationships, and expectations based on current thinking in this area?
3. *Statement of the purpose or problem*: What is it that you plan to investigate? What are the general goals of the study? Define the problem.
4. *Questions to be answered*: What are the questions you expect to be able to answer once the research is finished?
5. *Statement of hypotheses or objectives*: Spell out the research hypotheses you will test or the specific objectives of the research. Be concrete and clear, making sure that each hypothesis or objective is stated in terms of *observable behavior* that allows you and your readers to evaluate the results objectively.
6. *Design and procedure*: Tell readers who your subjects will be, how you will select them, the conditions under which you will collect the data, the treatment variables you will be manipulating, what measuring instruments or data-gathering techniques you will use, and how you will analyze and interpret the data.
7. *Assumptions*: What assumptions have you made about the nature or cause of the behavior you are investigating, about the conditions under which the behavior occurs, about your methods and measurements, or about the relationship of this study to other persons and situations?
8. *Limitations*: What are the limitations of your study? You can't realistically do everything, so make explicit what your study can and cannot do: what limitations exist in your methods or approach? Are there any sampling restrictions or uncontrolled variables? Are there problems with instrumentation? What other compromises to internal and external validity did you have to make?

**Example of an operational definition:** "For the purposes of this paper, *chaos* will be defined as ...."

**Example of a behavioral definition:** "A subject's response was interpreted as affirmative when the subject .... A subject's response was interpreted as negative when the subject ...."

9. *Delimitations*: How have you had to narrow the scope of the study to make it do-able? Did you focus only on selected aspects of the problem, certain areas of interest, a limited range of subjects or level of sophistication?
10. *Definition of terms*: Define the principal terms you will use, particularly where terms have different meanings to different people. Emphasize **operational** or **behavioral** definitions.

---

## Common Mistakes in Formulating the Problem

1. Collecting data without a well-defined plan or purpose, hoping to make some sense out of it after ward.
2. Taking a batch of data that already exists and attempting to fit meaningful research questions to it.
3. Undertaking a research project without reviewing the existing professional literature on the subject.
4. Conducting *ad hoc* research, unique to a given situation, that permits no generalizations beyond the situation itself and making no contribution to the general body of knowledge.
5. Failing to base research on a sound theoretical or conceptual framework which would tie together the various strands of research into a systematic and comparative scheme.
6. Failing to make explicit and clear the underlying assumptions within the research so that readers can evaluate it fairly.
7. Failing to recognize the implied and explicit limitations in the approach that limit the conclusions and how they might apply to other situations.
8. Failing to anticipate alternative rival hypotheses that would also account for findings similar to yours and which challenge your own interpretations and conclusions.