

Hints for Writing a Successful Proposal

Factors important in writing a quality proposal

- Does the proposal demonstrate a thorough knowledge of the field?
- Is there a well-defined gap?
- Are the objectives clearly stated?
- Is the study well-designed with appropriate methodologies?
- Does the description of methods demonstrate the technical competence needed to successfully carry out the project?
- Is the proposal well-written? Does it look good?
- Typos and grammatical errors create a negative impression of the author's competence and attention to detail.

Introducing the research problem & objectives

A proposal's introduction will be similar in structure and content to the introduction of a research paper. In other words, the Introduction should:

- Summarize the current state of knowledge.
- Identify the gap, question, or problem that the study will address.
- State the objective(s) of proposed study.

The primary goal of a proposal is to convince reviewers of the significance of the proposed work. It's not enough to assert that a problem exists or that a question has not been answered. Providing relevant background information in the Introduction is important in letting reviewers know:

- how well you have searched the literature to find relevant citations.
- how well you understand and explain the place of your proposed work within the context of the current literature.

"Refer to the literature thoroughly and thoughtfully. Explain what gaps in the literature would be filled by your project. In the past, research proposals have not been funded when applicants seemed to be unaware of relevant published work or when the proposed research or study design had already been tried and judged inadequate." (NIH guidelines)

KEEP IN MIND that you are reviewing previous research to introduce **YOUR** study and to explain how your study will further the field's knowledge. Don't simply write a literature review. Use the literature to focus a reviewer's attention on the importance of **YOUR** study.

Describing proposed methods

The methods section of a journal article should be so detailed that another investigator could replicate the study. For a proposal, fewer details (but more explanation of rationale) are needed. In other words, you should do more than just explain how the study will be carried out; explain why this approach, and not others, was chosen. The methods section of a proposal should be well-documented, with references used where possible to lend support to your choices. Providing such information helps reviewers understand what's needed to accomplish the project and helps reviewers determine whether you understand what's needed to carry out this project. As pointed out in the NIH (1993) guidelines:

"While you may safely assume the reviewers are experts in the field and familiar with current methodology, they will not make the same assumption about you . . . Since the reviewers are experienced research scientists, they will undoubtedly be aware of possible problem areas, even if you don't include them in your research plan. But they have no way of knowing that you too have considered these problem areas unless you fully discuss any potential pitfalls and alternative approaches."

Some reasons why applications aren't funded

- Lack of new or original ideas
 - Proposals that extend previous work to a limited degree, e.g., we know that individuals in many species of birds engage in extra-pair copulations but we don't know if they do in my species, or we know that individuals breeding in small forest fragments have lower nesting success than those in larger fragments but we don't know if they do in my state, are probably less likely to be funded than proposals that describe more original work.
- Unfocused research plan
 - All other things being equal, a proposal that is hypothesis-driven is likely to be more favorably received than one that is not. "Fishing expeditions" and primarily "descriptive" proposals are less likely to be funded.
- Insufficient knowledge of relevant, published work
- Questionable reasoning in experimental approach
- Unrealistically large amount of work
- Lack of sufficient experimental detail
- Poorly written
 - The ideas may be good but the writing is such that reviewers have trouble understanding what the writer is proposing.
 - Submission of an application that isn't well written suggests that the writer wasn't willing to invest sufficient time and effort. If not willing to do so with the application, then the applicant may not be willing to do so when carrying out their study.