

How to write a *PhD Proposal*

by

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*Writing a research proposal is both science and art

*A good research proposal is based on scientific facts and on the art of clear communication

Writing a formal research proposal should be started by the time one has decided on the topic for the study

Details of Research Proposal

- * Reject
 - * No goal or objective statement at the start of the proposal.
 - * Too technical and condensed will make it hard to read and understand.
 - * Too short will not give the reviewer the needed information to understand the proposal.
 - * Too long will make the reviewer skip to the background and makes the reviewer search for what is important.


Title of Research Project

- * Good

- * Concise title that gives reviewer a general sense of what you are investigating.

- * Reject

- * Too long and technical of a title will not gain the reviewer's attention or interest.
- * Too short or broad title will make the reviewer too critical of grant.

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- * Introduction should be short about one or two pages
 - * The problem should be stated in such a way that:
 - it's importance and relevance
 - is realized by any one who reads it

Background

(Review of Literature)

- * This section reflects extensive review of literature done by the investigator.
- * In this section what is already known about the topic is written.
- * It is important to make it coherent, relevant and easily readable.
- * It helps the investigator to gain good knowledge in that field of inquiry and to have insight on different methodologies that could be applied
- * Build up the background towards answering a specific question that is unknown

Reject

- * Do not expand background to unnecessary information that does not support the hypothesis.
- * Background should not exceed one third to one half of proposal.


Research methodology

Research methodology is a way to systematically solve the research problem.

It may be understood as a science of studying how research is done scientifically.

It is necessary for the researcher to know not only the research methods/techniques but also the methodology.

It is essential to discuss procedures clearly and completely with considerable amount of details

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- * Study design
 - * Study population / Sampling specifications
 - * Sample size needed
 - * Instrumentation
 - * Specific procedures

Study population / Sample specifications

- * It is important to describe which would be the study population
- * How study subjects would be selected, randomization process and other details should be given

Sample size

It is important to mention in the protocol what would be the minimum sample required and how it is arrived.

Determination of sample size is a bargain between precision and the price (Resources & expenses involved)

Description of process

- * Proposal should include the details of all process to be adopted in the study
- * How exposures, outcome variables and other variables are going to be measured should be described in detail
- * A brief description of how the data will be processed and use of statistical package if any should be given
- * What statistical tests of significance would be used?

Time Frame & Work Schedule

The proposal should include the sequence of tasks to be performed, the anticipated length of time required for its completion and the personnel required

- * It can be presented in tabular or graphic form (Gantt chart)
- * Flow charts and other diagrams are often useful for highlighting the sequencing and interrelationship of different activities in the study

Referees:

- * Good

- * Choose referees in your field of research
- * Choose a scientist/colleague that will be objective but not too critical of the science.

- * Reject

- * Do not choose close collaborators or competitors in your field with divergent views.
- * Do not choose the top scientists in your field since they will not respond and will be too critical in general.

Applicant's CV details:

* Good

- * List all awards especially awards directly related to your research.
- * List all publications in the last five years.
 - * Abstracts are an easy way to show productivity.
 - * Give impact factors for publications and citations if any.
 - * Give ranking of journal in your field of research if possible.

* Reject

- * No evidence of research activity or track record.
- * All middle authors for publications.

General Thoughts

- * Reviewers will not be experts in your field of research. Make the proposal accessible to them.
- * Get your proposal read by a colleague or someone in your area of research. They might find problems that reviewers will find.

References

- 1- <https://www.findaphd.com/advice/finding/writing-phd-research-proposal.aspx>
- 2- <https://www.morganandfrista.co.uk/phd-proposal-help.php>
- 3- الية كتابة اطروحة الماجستير او الدكتوراه و البحث العلمي الاستاذ المساعد الدكتور علي عادل ياسين - جامعة البصرة -كلية التربية للعلوم الصرفة- قسم علوم الحاسوب 2017-11-22
- 4- How to write a Research Proposal, [Research Proposal, www.pitt.edu > ~super7](http://www.pitt.edu/~super7)
- 5- Writing and Presenting a Project Proposal to Academics, Bianca Verlinden , PhD Molecular Parasitology, Department of Biochemistry University of Pretoria.
- 6- <https://www.slideshare.net/guest349908/the-research-p...>
- 7- [مقرر مبادئ البحث العلمي - د هدي لاشين و د هناء سمير غنية-
https://faculty.psau.edu.sa > filedownload](https://faculty.psau.edu.sa/filedownload)
- 8- [www.pitt.edu > ~super7](http://www.pitt.edu/~super7)