# How to Write a Good Postgraduate Research Proposal

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□A research degree (e.g. Masters and PhD,) can be one of the best experiences of your life. □What you gain along the way will serve you for the rest of life, if only to make you a more confident and knowledgeable person. □ In addition to making friends, meeting researchers and being part of the research community. ☐ It will help you to develop research skills as well as invaluable transferable skills which you can apply to academic life, your current job or a variety of

professions.

# What is a thesis proposal?

- OAn academic document, in which you as a the graduate student exposes your plans for the research project or thesis.
- oA contract between the student, the supervisor, and the other Committee member(s), stating that the student's plans would normally lead, upon completion, to the approval of a thesis or research project (based on relevance, originality, feasability).
- OA plan that might be adjusted and modified throughout the process of the thesis completion

# Who is responsible for the thesis or research project proposal?

- The thesis proposal is:
- OWritten by the graduate student only.
- Oriented and corrected by the supervisor.
- Oriented and approved by the thesis committee

Your proposal describes your proposed plan of work:

- What you intend to study (scope and research questions).
- <u>How</u> you intend to study your topic (methodology).
- Why this topic needs to be studied (significance).
- When you will complete this work (timeline).
- (Occasionally) Where you will conduct this work.

# Writing Thesis Proposals

### Purpose:

- Justify and plan (or contract for) a research project.
- Show how your project contributes to existing research.
- Demonstrate that you understand how to conduct discipline-specific research in an acceptable time-frame.

### **Audience:**

Your academic advisor and committee



- Understand that the proposal will be negotiated--be prepared to revise!
- Think of the proposal as an introduction to your thesis or dissertation.
- Remember that your proposal is not meant to limit ideas, but to help you think practically.
- Talk to your advisor!

### Statement of the Problem



- Answer the question: "What is the gap that needs to be filled?" and/or "What is the problem that needs to be solved?"
- State the problem clearly early in a paragraph.
- Limit the variables you address in stating your problem or question.
- Consider framing the problem as a question.

# Parts of a Proposal

- Title
- Abstract
- Introduction/Background
- Problem Statement
- Purpose/Aims/Rationale/R esearch Questions
- Review of Literature

- Methodology
- Significance/ Implications
- Overview of Chapters
- Plan of Work
- Bibliography

# What is the role of the graduate studies committee (GSC).

The committee is charged with ensuring that the three purposes of postgraduate proposals are met.

- ✓ They must verify that your topic is sound.
- ✓ That you are prepared to do the work.
- ✓ That the work seems to be interest.

To ensure this, the committee carefully read and review your proposal making comments intended you to improve any deficiencies in your proposal and /or proposed studies.

# What is the role of your advisor and of you, the student?

## The role of your advisor in the development of your thesis proposal is primarily to:

- ✓ Advise and proofread.
- ✓ Guid you to a specific, well-defined thesis topic.
- ✓ Suggest some initial background reading you should do.
- ✓ Suggest a structure to follow in writing your thesis proposal (if not, a structure suggested by the university).
- ✓ propose one or more potential solution strategies? methodologies for the work you will propose.

### What is your role?

✓It is your responsibility to do the necessary background reading to be able to clearly and concisely summarize the work related to your proposal.

✓You must ensure that this summary is complete and that all work discussed in it is relevant to your proposal.

✓Your proposal should be written by you (with your advisor's input if you want it). Your advisor should proofread what you write and may suggest changes in everything from structure to grammar and spelling.

It is your responsibility to make these changes.

✓Your goal is to take your advisor's advice and incorporate it to ensure that your proposal document is as close to perfect as possible.

- ✓ Before it has been carefully reviewed by your advisor. Remember that review by your advisor is always faster than review by the GSC.
- ✓ Multiple reviews of your proposal by your advisor prior to submission is the norm.



Do a good job and take pride in your proposal document. Remember that the quality of your proposal reflects on both you and your advisor and that the committee will not hesitate to reject a poorly prepared or incomplete proposal and certainly will not accept a proposal until they feel that it is complete, clear and free of presentation problems.

- ✓The length of a proposal often varies somewhat depending on the area of the proposed work and the topic itself. In general, a proposal is normally between 10 and 20 pages, single column, 1.5 spacing using 12pt font including figures and references. This is a guideline and the actual length of your proposal is best discussed with your advisor.
- ✓ Be aware, however, that excessively lengthy documents may be sent back unread to be revised to provide better focus. An upper bound of close to 20 pages is a good limit in practice. Also, please do not use a font size of under 12pt since your proposal should be easy for the committee members to read!

### Guidelines on writing a research proposal

- □The proposal is, in effect, an intellectual scholastic (not legal) contract between you and your committee.
- □It specifies what you will do, how you will do it, and how you will interpret the results.
- □The objective in writing a proposal is to describe what you will do, why it should be done, how you will do it and what you expect will result.

Being clear about these things from the beginning will help you complete your thesis in a timely fashion. A weak proposal can lead to a long, painful, and often unsuccessful thesis writing exercise.

### Guidelines on writing a research proposal

### Methodology

- ✓ Approach
- ✓ Data needs
- ✓ Analytic techniques
- ✓ Plan for interpreting results

Expected results

Budget

Bibliography (or References)

The proposal should have the standard sections of a research paper, each of which addresses basic questions:

#### 1. Introduction

What is the project about? Why is this an important research question? How will you analyze this issue?

#### 2. Literature Review

What do we already know about this issue? (What have others said and provided evidence for?)

#### 3. Methodology

How will you examine this issue?

#### *4.* The project time table

What are the main findings of the project? In what ways do these modify/add to the existing literature?

#### 5. Conclusions

What are the theoretical or policy implications of these findings? What are the fruitful research directions on this topic.

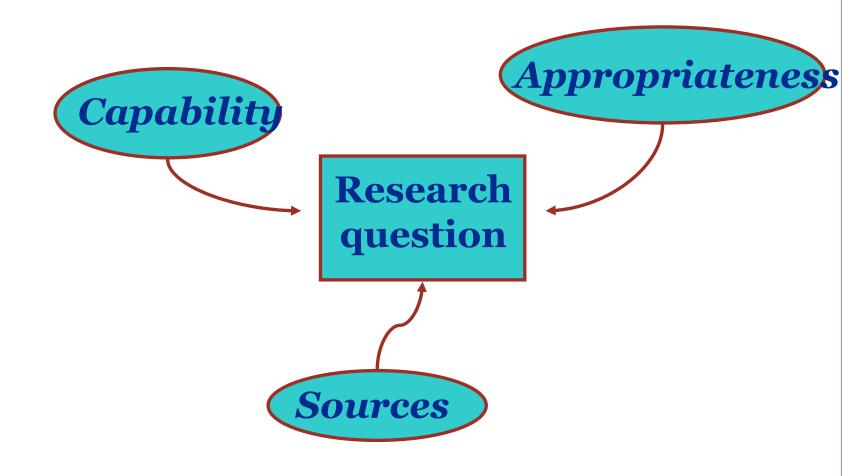
#### 6. References

Which sources did you consult?

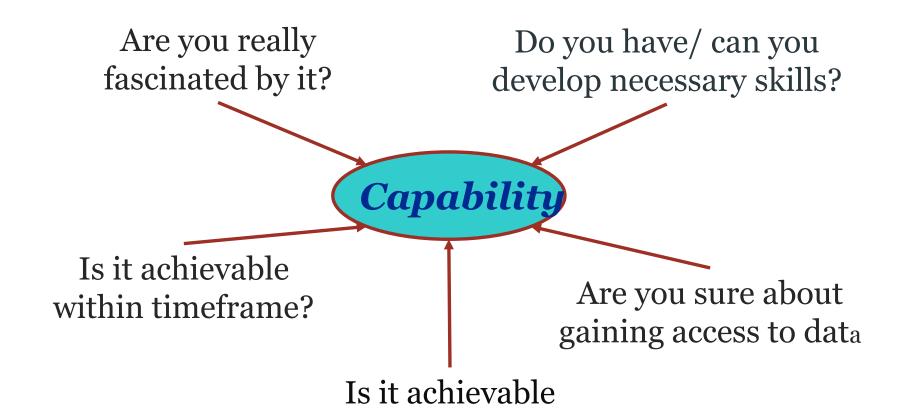
### Issues to be Considered

- ✓Get started Key issues & the topic
- ✓ Methodological sophistication
- ✓ Literature Review tips
- ✓The 'THESIS JOURNEY'
- ✓The Proposal (How to write it?)
- ✓ The structure of the main document
- ✓ Tips -Making a successful 'Thesis journey' from writing of the proposal to the defence of your thesis.

# Developing your research question

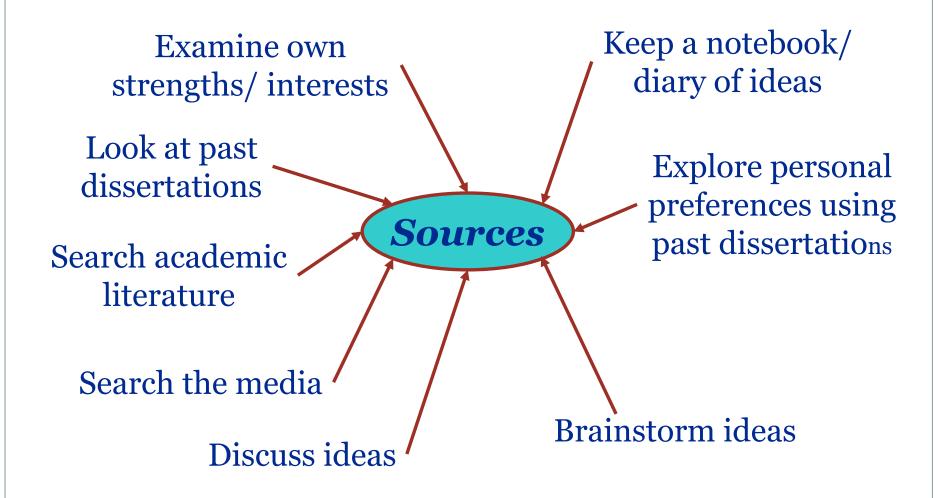


# Capability: is it feasible?

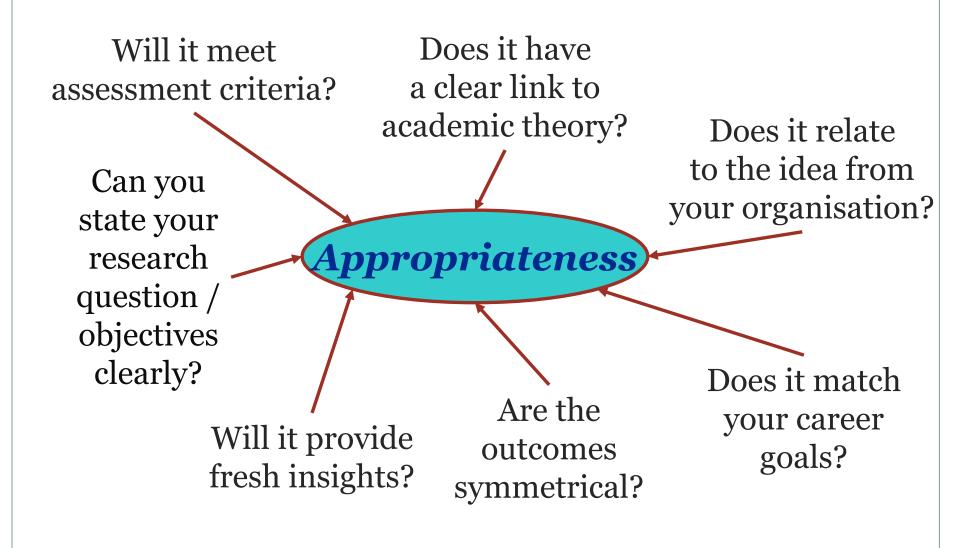


within resources?

# Sources: refining the research question



# Appropriateness: is it worthwhile?



## How do you choose a topic?

- ✓ Identify your areas of competence and interest (subjects).
- ✓ Focus on a certain subject, then a certain area in order to be more specific.
- ✓ Just think and write on a paper three different topics on the same area of your interest.
- ✓ Not too long (say two lines)

### Topic Cont..

- ✓Try to share with your peer group if it makes sense.
- ✓ Submit to your supervisor (the topic) before you invest resources in writing any detailed work.
- ✓ Avoid taking 'off shelf topics' Made by others!!!!
- ✓ Never wish to be given a 'cheap topic' by someone.

A TITLE that clearly conveys the theme of your research project.

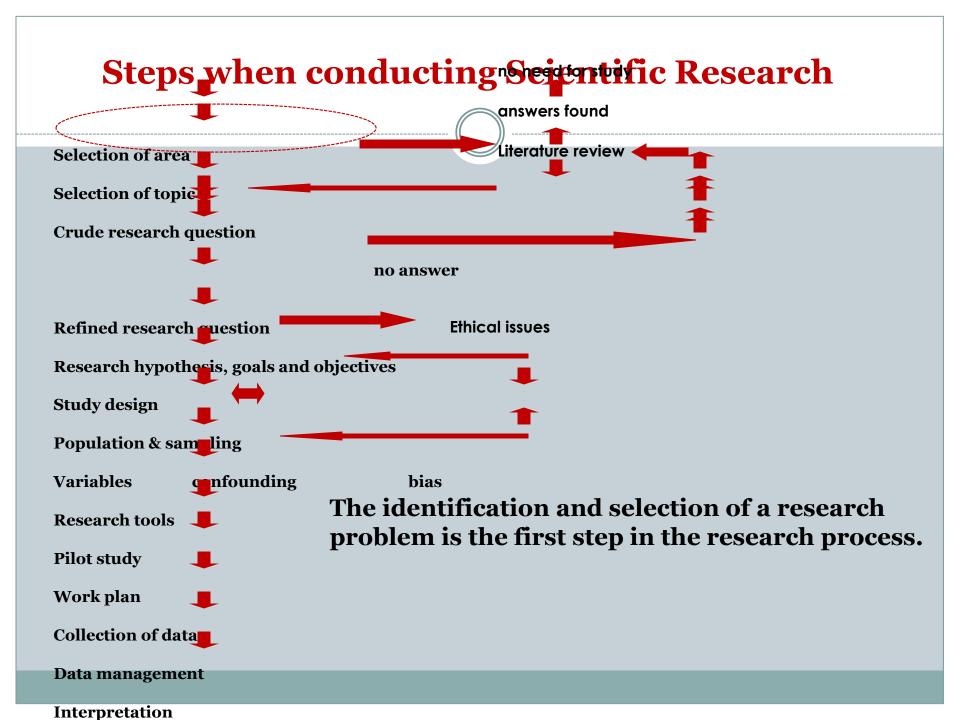
The main RESEARCH QUESTION that will be the focus of your research.

The EXPLANATION of why your research topic is important.

A brief LITERATURE REVIEW showing that you possess relevant knowledge to answer the research question.

A proposed METHODOLOGY for answering your research question.

TIME SCHEDULE for your research project.

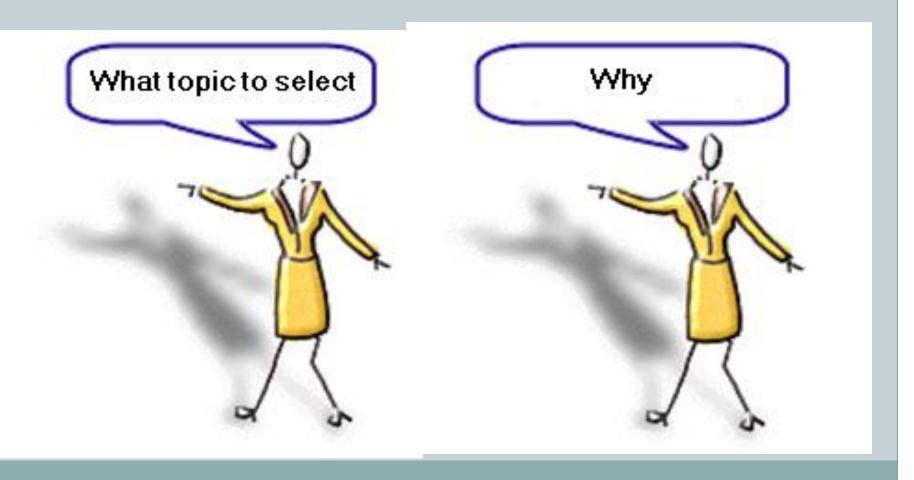


## Selection of Research topic

### Based on:

- o researcher's:
  - Specialty and subspeciality [e.g: Biochemistry, Enzymology; Botany, Zoology; Mathematics; Pharmacology; Nutrition; Pediatrics etc]
  - **Interest**
  - **Scientific** background
  - **Experience**
- Availability of experienced supervisors in the area
- Need for research in this area
- Available resources [interest of funding body]

# What to consider when Selecting a Research Problem?



### Selecting your project

Study the list of projects listed on the site of the department:

Make a short-list of projects that interest you. For each short-listed project, arrange to meet the supervisor. Use the meeting to:

- o ensure that you understand what the project entails.
- o decide whether you have the knowledge and skills needed to do the project?
- o get to know the supervisor.

### Selecting your project

Ensure that the project is within your capabilities:

- ○Do you have some knowledge of the problem domain?
- oDo you have the necessary technical skills? If not, are you confident that you will acquire the necessary knowledge and skills before the project starts?

MSc-IT students should be especially careful about projects that demand advanced technical skills.

## Writing your proposal

□Whether you're limited to 1-2 page pre-proposal or asked to write a full proposal, the rules about producing a good research proposal are the same. If you want to have the best chance of being selected, your proposal has to be perfect and successfully written.

# This workshop provides tips on how to write a good research application

## What to put in your proposal?

- □Application processes are different for each University so make sure to follow the guidelines.
- □Guidelines are provided at the start of the online application for admissions.
- □ However, if you are not given any guidelines on how to divide your research proposal, you could adopt the structure showing later.









## Writing the proposal:

□When drafting the proposal, bear in mind that individuals reviewing your application will often have to read a large number of proposals.

□So, well-presented and clearly written proposals are more likely to stick in the reviewer's mind. Avoid long and convoluted titles. You will get an opportunity to give more detail in your introduction.

## Plagiarism

☐ Make sure that you acknowledge the authors of ALL publications you use to write your proposal. Failure to do so will be considered as plagiarism.

Do not copy word for word what an author has said. You may think that the original author has presented the information with the best possible words in the best format. However, it is best to analyse it and re-write it in your own words.

□If you <u>absolutely have to quote an author ad</u> <u>verbatim, then make sure that you use quotation</u> marks and italics to indicate it.

## What is a research proposal?

Various terminologies are used to mean a research proposal depending on why the research is carried out?

- ✓ Research outline
- ✓ Synopsis of research
- ✓ Plan of research
- ✓ Research/project proposal
- ✓Thesis plan
- ✓Etc



## How to write research proposal?

- Regardless of your research area and the methodology you choose, all research proposals must address the following questions:
- ✓ What you plan to accomplish
- ✓ why you want to do it and
- ✓ how you are going to do it.

- □Research proposals have a limit on pages so you won't be able to analyse the whole existing body of literature.
- □Choose key research papers and explain clearly how your research will either:
- o Fill a gap,
- Complete or follow on from previous research.
- Applying a known methodology to a different field.

Journal articles, books, PhD theses, government and learned society reports are better than non-peer-reviewed information you may find on the internet.

How to write different components research proposal?

The proposal should have sufficient information to convince your readers that you have an important research idea, that you have a good grasp of the relevant literature and the major issues, and that your methodology is sound.

Sufficient does not mean too much!!!!

#### **Title**

It should be concise and descriptive. Think of an informative but catchy title. An effective title not only pricks the reader's interest, but also predisposes him/her favorably towards the proposal.

#### **Abstract**

It is a brief summary of approximately 300 words. It should include the research question, the rationale for the study, the hypothesis (if any), the method and the main expected findings.

## How to write research proposal?

#### Introduction:

□A well-written introduction is the most efficient way to hook your reader and set the context of your proposed research.

□Get your reader's attention early on and do no waste space with obvious and general statements.

□The introduction is your opportunity to demonstrate that your research has not been done before and that the proposed project will really add something new to the existing body of literature.

□Your proposal does not have to be worthy of a Nobel prize but it has to be based on sound hypotheses and reasoning.

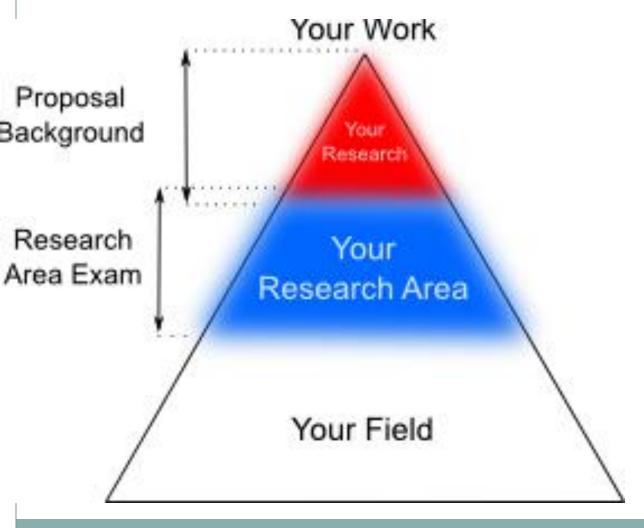
## Suggested format for an introduction:

- Introduce the area of research
- Review key publications
- Identify any gap in the knowledge or questions which have to be answered
- Your hypotheses
- Your aims and objectives, including a brief description of the methodology
- How is your research beneficial and to whom

## Introduction

- Broad information on topic
  - Previous research
- Narrower background information
  - Need for study
- Focus of paper
  - Hypothesis
- Summary of problem (selling point)

# How to narrow your topic?



# Broadest scope, designed to appeal to diverse readers

Progressively narrower scope: concepts, species, geographical scale, etc. with a smooth connection at each transition to avoid

losing any readers that we started with

Study goals: hypotheses

## **Making the Purpose Clear:**

The general purpose of the study can be stated at the end of the introduction.

The purpose of a study can be expressed in three ways:

- > as aims and objectives
- >as research questions
- > as hypotheses

or a combination of these.

## Example 1 (Clinical study-related)

- The purpose of this study is to measure selected biochemical parameters in autistic children either with normal or typical sensory performance (control autistics), or with different levels of sensory processing status dysfunction, compared to age and gender matching healthy control subjects.
- Find the correlation between biochemical alteration of the measured parameters and sensory dysfunction.

## Example 2

This research proposes to evaluate the
Example 3
My research has two aims: firstly to describe the
and secondly to
test
Example 4
The objectives of this research are as follows:
1
9

## How to write research proposal?

#### Literature Review

- ✓ most professors prefer a separate section, which allows a more thorough review of the literature

  The literature review serves several important functions:
- ✓ Ensures that you are not "reinventing the wheel"
- ✓ Gives credits to those who have laid the groundwork for your research
- ✓Demonstrates your knowledge of the research problem
- ✓ Demonstrates your understanding of the theoretical and research issues related to your research question

#### Literature Review

- ✓ Shows your ability to critically evaluate relevant literature information
- ✓Indicates your ability to integrate and synthesize the existing literature
- ✓ Provides new theoretical insights or develops a new model as the conceptual framework for your research
- ✓ Convinces your reader that your proposed research will make a significant and substantial contribution to the literature (i.e., resolving an important theoretical issue or filling a major gap in the literature).

## How to write research proposal?

#### Methods:

The Method section is very important because it tells your Research Committee how you plan to tackle your research problem. It will provide your work plan and describe the activities necessary for the completion of your project.

✓ The guiding principle for writing the Method section is that it should contain sufficient information for the reader to determine whether methodology is sound

#### Methods:

✓ Furthermore, since there are no well-established and widely accepted canons in qualitative analysis, your method section needs to be more elaborate than what is required for traditional quantitative research

✓ More importantly, the data collection process in qualitative research has a far greater impact on the results as compared to quantitative research.

- ✓ Subjects or participants Who will take part in your study? What kind of sampling procedure do you use?
- ✓ Instruments What kind of measuring instruments or questionnaires do you use? Why do you choose them? Are they valid and reliable?
- ✓ Procedure How do you plan to carry out your study? What activities are involved? How long does it take?

## How to write research proposal?

## **Results:**

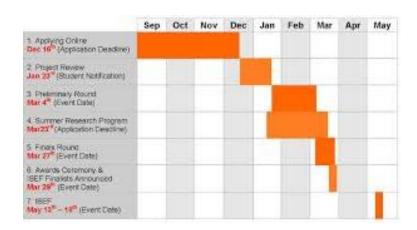
Obviously you do not have results at the proposal stage. However, you need to have some idea about what kind of data you will be collecting, and what statistical procedures will be used in order to answer your research question or test you hypothesis.

## Discussion

It is important to convince your reader of the potential impact of your proposed research. That is why you also need to mention the limitations and weaknesses of the proposed research, which may be justified by time and financial constraints as well as by the early developmental stage of your research area.

A statement of the resources required to complete your work and how you will gain access to them.

A timeline for the completion of your thesis providing realistic dates.



## How to write research proposal?

#### Common mistakes in proposal writing:

- ✓ Failure to provide the proper context to frame the research question
- ✓ Failure to cite landmark studies
- ✓ Failure to accurately present the theoretical and empirical contributions by other researchers
- ✓ Failure to stay focused on the research question
- ✓Too much detail on minor issues, but not enough detail on major issues
- ✓ Too much rambling going "all over the map" without a clear sense of direction.
- √Too many citation lapses and incorrect references
- ✓Too long or too short.

#### DOs and DO NOTs

#### DO

- ✓ Produce/prepare a professional looking proposal
- ✓ Make it interesting
- ✓ Make it informative, meaningful
- ✓Write easy way to read
- ✓ Present content in a page
- ✓ Use clear headings/sub-headings
- ✓Be concise, precise
- ✓ Check spelling, grammar
- ✓ Present in accurate/acceptable format

#### □DO NOTs

- ✓ Use no ward which you do not understand
- ✓ Use of difficult ward unimpressive to the readers/supervisor/authoruty

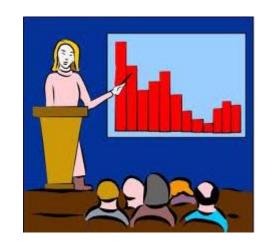
#### Other resources

- -The Postgraduate Companion (2008). Chapters 4-7; Hall G. and Longman J. Eds, Sage Publications London, UK.
- The PhD Application Handbook (2006). Bentley PJ. Eds, Open University Press, Maidenhead, UK.
   Vitae (formerly UKGRAD): <a href="http://www.vitae.ac.uk/">http://www.vitae.ac.uk/</a>
- -"What do PhDs do": Link to WDPD; Link to "What motivates PhD students"; Link to "Getting the most out of your PhD"

# How to defend your proposal like a professional

## Prepare your presentation

- ✓ Use bullet points
- ✓ Make sure that you emphasize the important parts.
- ✓ Check that there are are no grammatical mistakes.
- ✓ Make sure that the pictures and images enhance your presentation





## Be on time

✓Be sure you are ready to start on time

✓Do not let your panel wait for you



## Remember to pray

Prepare well but don't forget that there are many things that are beyond your control





# Be confident but not arrogant





#### Be animated!

Try to move and not stay rooted to one spot.

Project your voice well or else use a microphone



#### Don't be defensive

Defense does not mean to be defensive.

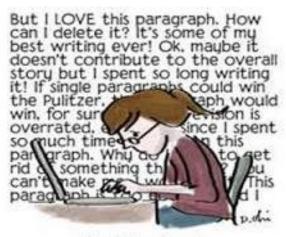
- ✓To defend your proposal means to justify the decisions you have made in choosing the variables and methods of your study.
- ✓No one can make a perfect study; there is always something to improve by the committee

- ✓Don't go beyond 30 minutes in your presentation.
- ✓ Remember, your committee has already read your proposal.
- ✓The most critical point to present and the essential parts are your conceptual framework and method of your stu

Show your appreciation for the help of the committee by thanking them after the defense and giving them a simple snack.



- ✓ Transcribe the comments & suggestions and give a printed copy to your supervisor.
- ✓ Revise your proposal accordingly.



**Revision Angst** 

✓ Submit final copy of the revised and approved thesis proposal to your supervisor.

✓Once the final version of your revised proposal has been approved start your work plan.

