

Welcome

Proposal Writing Session
HDR Students: Sem 1 2023
24 February 2023

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USP Handbook and Calendar: pp 87-91

Applications for admission into the Master programme must be made to the relevant Academic Unit Research Committee and include details required in the application for Admission to a Postgraduate programme, including a statement of research intent that has been discussed with and formally endorsed by a potential supervisor(s). This statement of intent shall be converted to a full proposal and endorsed by the supervisor.

Master's Students

- Student registration for the degree of Master's shall remain provisional until the formal acceptance of the research proposal. For full time students, the proposal should be submitted by the **end of week 7 of the semester**; for part time students, the proposal should be submitted by the **end of week 14 of the semester**.

PhD Students

- Student registration for the degree of Doctor of Philosophy shall remain provisional until the formal acceptance of the research proposal. For full time students, the proposal should be submitted in the **prescribed format by the end of the first semester**; for **part time students, the proposal should be submitted by the end the second semester**.

What is a PhD as distinct from a MSc ?

The aim of research is to generate **new knowledge** or **further extend our present understanding** of natural phenomena including testing and validating the truth/theory.

Full thesis: One year research

PhD: A substantial and original contribution to knowledge or **apply the knowledge to solve the problem.**”

5 SOURCES TO GET RESEARCH YOUR TOPIC

Professional arena: In the university setting, your supervisor or a conference provides topics and ideas.

Professional Trends: These are captured in technical bulletins, newsletters and magazines. Also, professional societies establish specific short- and long-term research goals and priorities for their professionals.

Social Trends: Social concerns and trends reflected in the policies, legislation and funding priorities of funding agencies provide a second and critical area of research.

Published Research: Research findings in journals and conference proceedings.

Existing Theory: Can be the source of new results (esp. true in formal sciences).

RESEARCH PROCESS-PHASES OF RESEARCH

- Idea generation phase
- Problem definition phase
- Procedures design phase
- Observation / Experimental phase
 - Data analysis phase
 - Interpretation phase
 - Communication phase

DEVELOPMENT STRONG RESEARCH QUESTION

[HTTP://WWW.THERESEARCHASSISTANT.COM/TUTORIAL/2-1.ASP](http://www.theresearchassistant.com/tutorial/2-1.asp)

- Do I know the field and its literature well?
- What areas need further exploration?
- What are the important research questions in my field that has not been answered?
- Has a great deal of research already been conducted in this topic area?
- Could my study fill a gap or answer the questions substantial enhance the understanding?
- Would funding sources be interested?
- Most importantly, will my study have a significant impact on the field.

Research problem

- Research problem is something that will contribute significantly to *present understanding (production of new knowledge)* of the topic and can be solved, but hasn't been yet.
 - The problem/solution is **logical, understandable, confirmable**, others see value in doing it, and the results are clear, interesting, and **useful.**

WHERE REQUIRED AND HOW MUCH

For every research, the literature review is required

A reasonable number of references in a literature review would be:

- undergraduate review: 5-20 titles depending on level.
 - Honours dissertation: 20+ titles.
 - Masters thesis: 100+ titles
 - Doctoral thesis: 200+ titles

Scientific Papers: Introduction and Discussion

1. **Review Articles:** are primarily written by highly experienced scholars on their areas of research interest.
1. **Review for Thesis/Grant proposals:** This is often written as part of a postgraduate thesis proposal, or at the commencement of a thesis, and grant proposals.

More than 20 Masters 40 PhD

WHAT IS LITERATURE AND LITERATURE REVIEW?

It covers books, journal articles, newspaper articles, historical records, government reports, dissertations, etc.

- A literature review is an extensive, exhaustive, and systematic examination of publications relevant to the stated research problem, identifying the **strengths and gaps in the knowledge** of the research problem/area
 - It is an analysis of prior academic research so as to identify the **who, what, where, and why's** of the chosen topic area.
 - **Critical literature Review:** is a critical assessment of the relevant literature in your field of research
- A literature review -**
- **identifies the gap in the knowledge**
 - identifies areas of controversy in the literature
 - **formulates questions that need further research**

LITERATURE REVIEW

Literature' can include a range of sources:

- Journal articles
- Monographs
- Computerized databases
- Conferences proceedings
- Dissertations
- Empirical studies
- Government reports and reports from other bodies
- Historical records
- Statistical handbooks

○ A literature review is an extensive, exhaustive, and systematic examination of publications relevant to the stated research problem, identifying the strengths and gaps in the knowledge of the research problem/area.

○ It is an analysis of prior academic research so as to identify the **who, what, where, and whys** of the chosen topic area.

REASONS TO REVIEW THE LITERATURE

- Determine previous research on the topic of interest
- Determine level of theory and knowledge developed
- Identify areas of controversy in the literature
- Determine relevance of current knowledge base to the problem area
- Provide rationale for the selection of research strategy
- Formulate questions that need further research

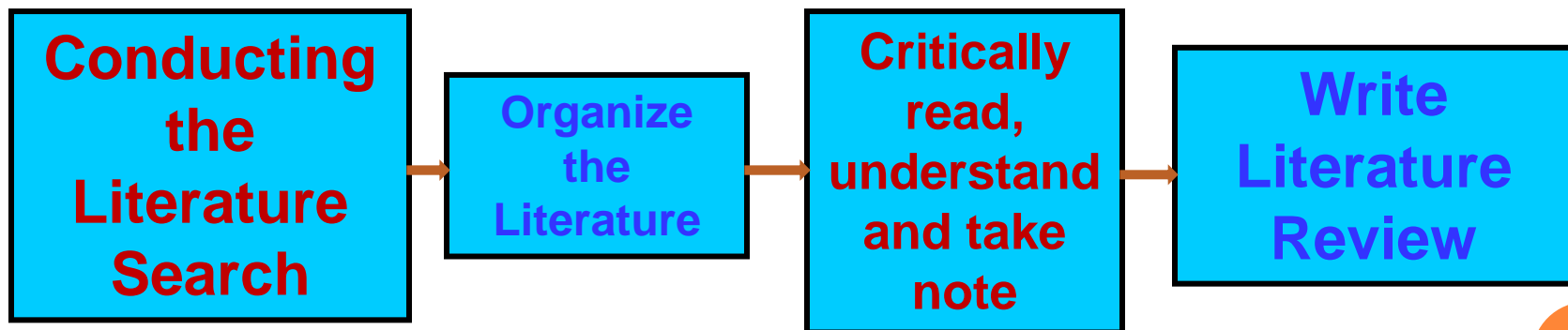
LITERATURE REVIEW

THREE Important Reasons

- Determine previous Research on topic of interest
- Determine level of theory and knowledge developed
- Determine relevance of current knowledge base to the problem

When to start Literature Review?

- Identify the your sources of Literature Review
- List them according to priority



HOW TO WRITE A LITERATURE REVIEW? RESEARCH PROPOSAL: THEMATIC, CONCEPTUAL, METHODOLOGICAL

A *literature review* synthesizes many studies in one paragraph. Each paragraph of the literature review should classify and evaluate the themes of the studies that are relevant to your topic/thesis. Each paragraph or section of your review should deal with a different aspect of the literature.

Academic literature review must have an **introduction**, **body**, and **conclusion**.

Introduction paragraphs:

The nature of the topic under discussion (the topic of your review /thesis), the basis for your selection of the literature



Body paragraphs

Discussion of each related concept, construct, principle, theory and model in current literature; Brief review of related study designs and their results, Critical evaluation or appraisal of current related research and knowledge, Critical summary of current knowledge and gaps in literature, Integration of various works reviewed; Fit of your work with the collective knowledge related to topic under investigation.

Conclusion should include:

A summary on: major agreements and disagreements in the literature, general conclusions where your thesis sits in the literature (Remember! Your topic could become one of the future texts on the subject—how will later research students describe **your thesis in their literature reviews**)

A LITERATURE REVIEW AND AN ANNOTATED BIBLIOGRAPHY: A COMMON MISTAKE

- **An annotated bibliography deals** with each text in turn, describing and evaluating the text, using one paragraph for each text. 
- **A literature review synthesises** many texts in one paragraph. Each paragraph (or section if it is a long thesis) of the literature review should classify and evaluate the themes of the texts that are relevant to your thesis; each paragraph or section of your review should deal with a different aspect/theme of the literature. 

PREPARATIONS BEFORE STARTING WRITING THE PROPOSAL

You have identified your specific problem of research – through **Literature Review and Using** four criteria (**logical, understandable, confirmable and useful**) and seven measurement (**relevance, duplication, urgency, political acceptability, feasibility, accessibility, ethical acceptability**), then you have identified the appropriate data research design/strategies and **appropriate data collection technique**, sampling etc.

**Think about writing the Problem
Research Statement, Aim, Research
Questions and or Hypothesis**

RESEARCH PROPOSAL

Research Proposal is *document* that describes why and how we propose to carry out our research idea.

However, your challenge is to convince members of the scientific community that you

- have identified a scientific problem
- have a theoretical background and a methodical approach to solve the problem
- within a realistic time frame and at reasonable expenses.

With your research you will add a new aspect to the scientific discourse.

Common Elements of a Proposal

Necessary Element	Information Included
Why	Title Introduction/Statement of Problem
What	Aim
What	Specific Objectives/Study Aims Literature Review/Significance
How	Research Methodology/Action Plan Reporting/Dissemination Plan
When	Management of Proposal Timeline
Who	Principle Investigator and Associate Investigators (if any) credentials: experience and publications etc.
Where	Institutional qualifications Resources
Supporting Material	Letters of support, Formal letters of agreement with collaborators, matched funding, ethical approvals
How much	Budget and its justification References

HYPOTHESIS AND RESEARCH QUESTION

Hypothesis : A prediction or explanation about future data based on previously collected data.

Null Hypothesis or Alternate Hypothesis

A Research Question is a statement that identifies the phenomenon to be studied which should be clear and focused.

What is seasonal variation of Wahu Fish in Kiritimati Island ocean area?

Is there any improvement in Tuna fish management of Tonga?

TITLE

- Should capture main research problem in a short phrase.
- **Should be brief** : so that person reading your proposal can easily work out main point of your study (not long or unrelated).
- Follow the specific length requirement if given by agency where you will submit it for funding.

INTRODUCTION

- Provides general overview of project's main idea.
- Addresses the question regarding what your project is all about and why it is important
- Should be brief-1-3 paragraph
- Cite few credible sources of data and information

RESEARCH PROBLEM STATEMENT

A Research Problem is not the same as a business problem **rather is the issue or subject area that you intend to investigate.**

It is a clear, stand-alone statement that makes explicit **what it is you are aiming to discover or establish.**

In general, a problem statement will outline the basic facts of the problem, explain why the problem matters, and pinpoint a solution as quickly and directly as possible.

Research Problem statements to have an outcomes based verbs; **not the verbs such as; understand”, “explore”, “investigate”, “examine” and “discuss” .**

AIM

- Are broad statements of desired outcomes, or **what you want to achieve**, or the general intentions of the research.
- Emphasize what is to be accomplished not how it is to be accomplished.

Generally, a project should have no more than **one-two or three** aims statements.

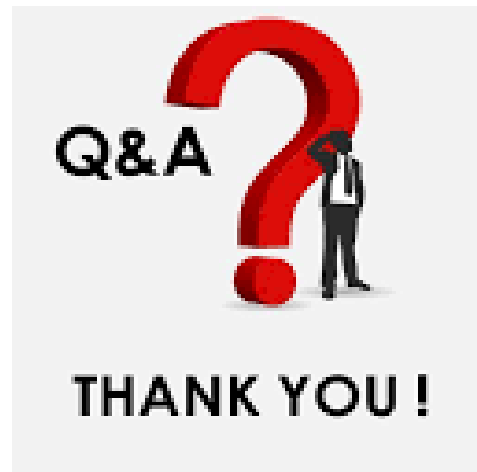
OBJECTIVES (SPECIFIC AIMS)

- Objectives are sub gaps (gap1, gap 2 gap3---) called “**critical building blocks**” of the entire research problem.
- They **concisely** describe what will be evaluated or tested in your proposal- **normally one sentence for each.**
- **Must be feasible and doable**

WHY EXPERIMENTS NEED TO BE DESIGNED

- For a good Research designs, we need to understand following basic elements:
 - **variables,**
 - **associations,**
 - **sampling,**
 - **random selection,**
 - **random assignment,**
 - **qualitative and quantitative data,**
- **project objectives, project activities, and**
 - **Hypothesis**
 - **Research Questions**

**THANK YOU FOR TODAY:
FURTHER SECTIONS OF THE PROJECT:
METHODOLOGY, WORKPLAN,
BUDGET, GANTT CHART,
REFERENCES, PROJECT
ADMINISTRATION ETC WILL BE
DISCUSSED IN THE NEXT SESSION IN WEEK
5: PART II**



Welcome

Proposal Writing Session 2
HDR Students: Sem 1 2023
20 March 2023

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RESEARCH METHODOLOGY

- In this section each action process is described in clear details Including: **1. Research Design** (Experimental type or Naturalistic Inquiry, or Mixed), **2. Study boundaries, collecting and analysing the information.**
- Should include justification for why a particular action process will be taken.
- It should display the coherence with literature review and aim and should be “doable” within resources available and/or requested.
- **Data Collections and Analysis Details**

RESEARCH METHODOLOGY: RESEARCH DESIGN

- In the experimental type design-state type of strategy (either of 4 types), independent and dependent variable, sampling, sample size, selection etc.
 - Address the Validity and Reliability of design.
 - State how independent and dependent variables are related: **Causal, explanatory, mediator, predictor.**
-
- In naturalistic Inquiry specify: the context, field, geographic location, data collection techniques (informant, participant observation, Interview), and analytical Plan.

RESEARCH METHODOLOGY: COLLECTING INFORMATION

- Variable
- Type of study
- Data collection techniques
- Sampling
- Plan for data collection
- Plan for data Processing and Analysis
- Ethical Considerations
- Pre-test or Pilot study

Features of Qualitative & Quantitative Research

Qualitative (Naturalistic Enquiry)

"All research ultimately has a qualitative grounding"
- Donald Campbell

The aim is a complete, detailed description.

Researcher may only know roughly in advance what he/she is looking for.

Recommended during earlier phases of research projects.

The design emerges as the study unfolds.

Researcher is the data gathering instrument.

Data is in the form of words, pictures or objects.

Subjective - individuals' interpretation of events is important, e.g., uses participant observation, in-depth interviews etc.

Qualitative data is more 'rich', time consuming, and less able to be generalized.

Researcher tends to become subjectively immersed in the subject matter.

<http://wilderdom.com/research/QualitativeVersusQuantitativeResearch.html>

Quantitative (Experimental Study)

"There's no such thing as qualitative data. Everything is either 1 or 0"
- Fred Kerlinger

The aim is to classify features, count them, and construct statistical models in an attempt to explain what is observed.

Researcher knows clearly in advance what he/she is looking for.

Recommended during latter phases of research projects.

All aspects of the study are carefully designed before data is collected.

Researcher uses tools, such as questionnaires or equipment to collect numerical data.

Data is in the form of numbers and statistics.

Objective - seeks precise measurement & analysis of target concepts, e.g., uses surveys, questionnaires etc.

Quantitative data is more efficient, able to test hypotheses, but may miss contextual detail.

Researcher tends to remain objectively separated from the subject matter.

WORK PLAN:

What is a work plan?

A **WORK PLAN** is a schedule, chart or graph that summarizes the different components of a research project and how they will be implemented in a coherent way within a specific time-span.

It may include:

- The tasks to be performed;
- When and where the tasks will be performed; and
- Who will perform the tasks and the time each person will spend on them.

WORK PLAN

- **Time Table:** Provides a road map and schedule of the actions you will take.

Work Schedule and Gantt Chart

- **Identify statistical and analytical methods that will be used for each objectives**
- **Management Plan:** show credentials of the team (experience and capabilities). Explain how project will be executed by the team- who will do what? *i.e.* roles and responsibilities.
- **Administration and Utilization of results:** How project will be administered *i.e.* supervisors.

WORK PLAN: Work Schedule

Various Work Scheduling and Planning Techniques

The work schedule

A **WORK SCHEDULE** is a table that summarizes the tasks to be performed in a research project, the duration of each activity and who is responsible for the different tasks.

- The tasks to be performed;
- The dates each task should begin and be completed;
- Research team, research assistants and support staff (drivers, typists) assigned to the tasks.
- Person-days required by research team members, research assistants and support staff. The number of **person-days** equals the number of working days **per person**).

WORK PLAN: Work Schedule

TASKS TO BE PERFORMED	DATES	PERSONNEL ASSIGNED TO TASK	NO. OF PERSON-DAYS REQUIRED
1. Finalise research proposal and submit to MOH for clearance	2-7 March 1999	Team Team leader (TL)	6x2 = 12 days
2. Translate questionnaires, typing, multiplying	23-27 March 1999	Team (partly) secretary	3x2 = 6 days 1x2 = 2 days
3. Recruit research assistants	6-25 April 1999	TL.	1x1 = 1 day
4. Obtain clearance and orient of DHOs, health institutions and village health workers	6-25 April 1999	TL. secretary	1x5 = 5 days 1x2 = 2 days
5. Train research assistants	5-7 May 1999	Team + assistants	5x3 = 15 days 5x3 = 15 days
6. Pre-test study	11-30 May 1999	Team + assistants + facilitator + drivers	5x2 = 10 days 5x2 = 10 days 1x2 = 2 days 2x2 = 4 days
7. Collect data	1 July 1999 - 31 December 1999	Team + assistants + 2 drivers	5x20 = 100 days 5x20 = 100 days 2x50 = 100 days
8. Process data + make preliminary interpretation	End of each month of data collection	Team + facilitator	5x6 = 30 days 1x2 = 2 days
9. Analyse data and write report	3-15 Feb. 2000	Team + facilitator + secretary	5x15 = 75 days 1x15 = 15 days 1x5 = 5 days
10. Disseminate and discuss research findings and preliminary recommendations with community members, health staff	End of Feb. 2000	Team + secretary + drivers	5x1 = 5 days 1x1 = 1 day 2x1 = 2 days
11. Disseminate and discuss of research findings and preliminary recommendations with policymakers/ managers/ others	End of Feb. 2000	Team	5x1 = 5 days
12. Draft preliminary Plan of Action	End of Feb. 2000	Team	5x2 = 10 days
13. Hold meetings with policy makers/managers/others to discuss plan of action for implementing recommendations	March 2000	Team	5x1 = 5 days
14. Follow up on implementation of Plan of Action	From March onwards	TL and rest of team	

**Budget
Corresponding
to each Task**

WORK PLAN: GANTT CHART

TASK TO BE PERFORMED	2017 2018					2020				
	Jul-D	J-M	A-J	J-S	O-D	J-M	A-J	J-S	O-D	Jun
Literature review and ordering material for Exp setup	█	█								
Experimental setup at Vanuatu and Laucala campuses and data analysis			█	█						
Working on Objective 1 and 2 and data analysis and communication of results to journals					█					
Working on Objective 3 and 4 and communication of results to journals						█				
Working writing the thesis. Final thesis submission to AURC. OR Final project Report Submission							█	█	█	█

BUDGET AND JUSTIFICATION

- Budget includes Cost of each item yearly

Year 1

Item	Quantity	Rate (F\$)	Total (F\$)

Year 2

Year 3

Finally, set out the total budget in the following way

Travel	F\$
Subsistence/Accommodation	F\$
Equipment & consumables	F\$
Research support staff	F\$
Miscellaneous	F\$
TOTAL	F\$

Justifications: Reasons for the costs and special items **especially like Laptop, computer, cameras etc**

REFERENCES

- List the sources of information you have used to prepare your proposal in a specific consistent style.
- Sources could be “ Literature” , websites for data sources or any other online information you have used for your project.

Avoid Plagiarism: It is very **serious**. The project will go tough the Turnitin check and verification.

FOUR THINGS FOR YOUR PROPOSAL

First, the proposal needs to identify a specific research area in the broader landscape of the discipline and **establish why it is significant and worth exploring**.

Second, the proposal needs to identify an existing or newly identified gap in knowledge that can be developed into a significant research problem.

Third, the proposal needs to build a convincing case for your project as a viable way of approaching the research problem.

Finally, the proposal needs to demonstrate that your approach to the problem is achievable within the period of your candidature.

Basic ideas

- ▶ Be conscious of what you're doing
- ▶ Invest heavily in the planning phase
- ▶ Anticipate problems
- ▶ Learn to receive and give effective criticism
- ▶ Manage time well
 - ▶ Have I defined the project deliverables?
 - ▶ Have I established the scope of the project?

**THANK YOU FOR TODAY:
DISCUSSED IN THE NEXT SESSION IN WEEK
7: PART III
THAT WILL BE A Q & A SESSION**

