
Topic ► Writing the 10 Research Proposal and Research Report

LEARNING OUTCOMES

By the end of this topic, you should be able to:

1. Describe the elements of a research proposal;
2. Write a research proposal according to the proposed format; and
3. Explain the elements of a research report.

► INTRODUCTION



From Chapter 1 to Chapter 9, we discussed the methods and techniques of conducting research, both from the quantitative and qualitative perspective. This chapter will focus on the writing process and will address two important tasks that most graduate students will have to do. First, is the writing of the research proposal and second is the writing of the research report.

10.1 WHAT IS A RESEARCH PROPOSAL?

All graduate students pursuing a programme requiring the submission a project paper, thesis or dissertation will have to write a research proposal. What is a research proposal? A research proposal is a short document written to inform others (your supervisor or graduate committee) of a proposed piece of research. You should be aware that a research proposal can be rejected as “unsuitable” or “poorly designed”. So the proposal is obviously an important document. Therefore it is that you spending some time getting it right. A well planned proposal will save you a lot of time in the long run. If the proposal is well-designed, it will form the outline of your project paper, thesis or dissertation which you can follow. In other words, the proposal maps out the different parts of the final project paper, thesis or dissertation. The elements that are usually included in any research proposal are shown in Figure 10.1.

(a) Introduction

- (i) This where you provide an introduction or background to the research problem or issue that you intend to study. This should be as brief as possible (1 page). Do not ramble! The introduction should be clear and straight to the point. Describe the general field of research and then narrow down to the specific area you are concerned with.
- (ii) Show that there is an issue that needs to be addressed or a “gap” in the research that you will fill. When you are able to identify the issue or gap, then the research question will fall in place naturally. Think of the Introduction as follows:

Imagine a group of academics discussing in general the area of study you are interested in. You join in the conversation (assuming they allow you to!) and draw their attention to your specific problem of interest. You tell them that there is something that has not been resolved or there is a gap or problem. You argue that this gap or problem has to be addressed and go on to describe it in detail. Then you tell your listeners how your study will attempt to answer the research question.

- (iii) Remember, the problem statement may only be tentative at this stage as the research has not been carried out yet. It is not expected in a proposal that you have an answer to your research question. It helps if you have a tentative answer, however. A hypothesis is useful for this purpose, though this might only be necessary for more empirical subjects.

- (iv) You should use simple and jargon-free language. The introduction must actually narrow down; not get wider. You must demonstrate that you understand well the issues in the area and that you are focussing on a particular issue.³

Chapter 1	Introduction
	1.1 Background to the study
	1.2 Problem statement
	1.3 Objectives of the study
	1.4 Research questions
	1.5 Research Hypotheses (if any)
	1.6 Significance of the study
	1.7 Limitations of the study
	1.8 Definitions of terms
Chapter 2	Review of Literature
	2.1 Previous studies
	2.2 Theoretical framework
	2.3 Methodological issues
Chapter 3	Methodology
	3.1 Sample
	3.1 Instrumentation
	3.2 Data collection procedures
	3.3 Proposed framework for data analysis
	References
	Appendices
	Note: The headings in each chapter may vary in different studies.

Figure 10.1: Format for the research proposal

(b) **The Research Question**

- (iii) The research question may not necessarily be a “question” as such, but can be a statement of a problem to be investigated.
- (iv) The “research question” can be a statement on what is to be investigated; it can be phrased in the form of a question or formal hypothesis [*Refer to Chapter 1: The Research Process for more details about ‘The Research Question’*].
- (v) State the Research Question clearly as it will influence research methodology and the type of data analysis to be performed.

(c) **Significance of the proposed research (Justification)**

- (i) Briefly tell the reader the significance of the study (justify doing the study).
- (ii) You can argue the significance of your study based on the following criteria:
 - the problem or gap demands attention because the findings could influence practice and policy
 - the methodology you are using is unusual
 - you are studying certain variables that has not been given attention in previous studies
 - your study will contribute to the body of knowledge in the field
 - the outcome could be the extension of a theoretical model

(d) **Preliminary Literature Review**

- (i) This is where you provide more detail on what others have done in the area, and what you propose to do [*Refer to Chapter 2: Theory and Review of Literature for more details*]
- (ii) You need to cover the following:
 - The major issues or schools of thought
 - The gaps in the literature (in more detail than that provided in the introduction)
 - Research questions (for qualitative research and hypotheses (for quantitative research) which are connected carefully to the literature being reviewed
 - Definition of key terms (this can be done when you introduce each idea, or in a definition sub-section)
 - Questions arising from the gaps that can be the focus of data collection or analysis
- (iii) The theoretical framework usually forms the final part of the Literature Review section. It describes the model that you are using in the thesis to demonstrate your point.
- (iv) Read a thesis in a similar area to get a feel for what is required in this section.

(e) Proposed Research Methodology

- (i) You do not have to describe the methodology used in great detail (this will be done in the thesis) but you should justify its use over other similar methodologies.
- (ii) For example, you could explain:
 - Why you are using a certain paradigm or theory
 - Why you are using qualitative or quantitative research
 - Why you are using a case study of a specific kind
 - Why you are using surveys, correlational experiments, field studies, specific statistical measurements, etc.
 - Why you are using a certain dependent or independent or moderating variables
 - Why you have chosen a sampling frame and the size of a certain sample
 - How you are proposing to have access to the data
 - How you are proposing to analyse the data
- (iii) You also need to provide operational (testable or at least well-supported in the literature) definitions of key terms used.

(f) Project Timetable

- (i) Provide a project timetable specifying how long you will take to complete the project paper, thesis or dissertation. For example, indicate how long you will take to collect data, analyse the data and write up the final report.
- (ii) It gives you a framework on the direction your proposed thesis will take. It shows the reader that the project is well-organised and achievable in the time available.

**(g) List of References**

- (i) This must be provided in the usual scholarly fashion. It helps to convince your reader that your proposal is worth pursuing if you can identify literature in the field and demonstrate that you understand it.

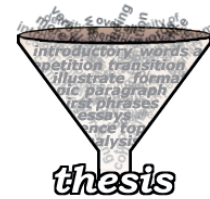
- (ii) Use the citation style proposed by the Manual of the American Psychological Association (APA style for short).

10.2 RELATIONSHIP BETWEEN THE RESEARCH PROPOSAL AND THE FINAL RESEARCH REPORT

Note finally that while the proposal can be mapped onto the final thesis, much work needs to be done. The proposal merely provides a “shell”. The thesis fills in the details. Parts of the proposal are not required in a final thesis (for example, resources, and timetable). The order and arrangement of each document is slightly different.

10.3 THE RESEARCH REPORT

The purpose of this section is to give you a general guide for preparing the project paper, thesis or the dissertation. The format discussed may vary with respect institutions. See Figure 10.2 which shows widely used format for the research report.



(a) Preliminary Materials

The preliminary materials include the title page, the abstract, acknowledgements, table of content, list of tables and list of figures.

(i) Title Page

Although title page may differ from one institution to another, they usually include: (1) the name of the topic, (2) the name of the author, (3) the relationship of the report to a degree requirement, (4) the name of the institution where it is to be submitted, and (5) the date of presentation (see Figure 10.3). The title should be concise and should indicate clearly the purposes of the study. Keep in mind its possible usefulness to the reader who may research the database in which it may be listed. The title should not claim more than the study actually delivers. It should not to be stated broadly and make it difficult for the reader to pin point what the study is about.

For example, the title *“The Self-Concepts of Urban Poor Children”* is too general and a more precise title would be *“The Self-Concepts of a Group of Urban Poor Children in Kuala Lumpur”*.

Format of the Research Report

Preliminary Materials

TITLE PAGE

Acknowledgements

Table of contents

List of tables (if any)

List of figures (if any)

Body of the Report

Chapter 1 Introduction

- 1.1 Background to the study
- 1.2 Problem statement
- 1.3 Objectives of the study
- 1.4 Research questions
- 1.5 Research Hypotheses (if any)
- 1.6 Significance of the study
- 1.7 Limitations of the study
- 1.8 Definitions of terms

Chapter 2 Review of Literature

- 2.1 Previous studies
- 2.2 Theoretical framework
- 2.3 Methodological issues

Chapter 3 Methodology

- 3.1 Sample
- 3.1 Instrumentation
- 3.2 Data collection procedures
- 3.3 Framework for data analysis

Chapter 4 Data Analysis and Results

(Description of statistical analyses in relation to research questions/hypotheses/objectives and presentation of relevant tables and figures)

Chapter 5 Discussion and Conclusion

- 5.1 Summary of main findings
- 5.2 Discussion
- 5.3 Implications
- 5.4 Directions for future research

Supporting Materials

References

Note: The headings in each chapter may vary in different studies.

Figure 10.2: Format of a Research Report

The title should be in capital letters, single-spaced and centred between the right and left margins of the page. If the title goes beyond one line, the words in the title should be divided into lines so that each successive line is shorter than the one above it and is centred below it in an inverted pyramid style (see Figure 10.3).

(ii) **Acknowledgement**

An acknowledgment page is included if you have received unusual assistance in the conduct of the study. The acknowledgement should be simple and restrained. Do not indulge in flattery and excessive recognition for routine participation of family members, lecturers, supervisors, librarians and clerical helpers.

(iii) **Table of Content**

A table of contents serves an important purpose in providing an outline of the contents of the report. Differentiate between headings and subheadings using capitalisation and small letters. Page references for each topic should be indicated.

(iv) **List of Tables and Figure**

If tables and figures are included in the report, a separate should be included to list each table or figure. The full titles of figures and tables, worded exactly as they appear in the text, are presented with corresponding numbers and page locations.

Note: All pages in the preliminary section are numbered at the centre of the bottom margin with lower-case Roman numerals (i, ii, iii, iv).

(b) **Body of the Report**

It is usual for this section to be divided into 5 sections or topics.

(i) **Topic 1: INTRODUCTION**

The first topic serves as the introduction to the area under consideration. A clear statement of the problem with specific questions to be answered or hypothesis to be tested is presented. You should present the *significance* of the problem and its historical background appropriately. Also, include assumptions and *limitations* of the study. All *important terms that are operationally defined should* be included in this chapter. This is important because terms such as *gifted*, *underachiever* and many other terms are defined differently by different researchers.

(ii) **Topic 2: REVIEW OF RELATED LITERATURE**

This topic is a review of important literature related to your study. Extracts from previous research studies and significant writings of

authorities in the area studied are reviewed. This chapter provides a background for the development of your study and brings the reader up to date about research and thinking in the field. It also gives evidence of your knowledge of the field. You should avoid an article-by-article presentation but should indicate areas of agreement or disagreement in findings or gaps in existing knowledge. The journal *Review of Educational Research* can be referred to for examples of good critical reviews of the literature. Also, avoid excessive use of quotations. Nothing is more tiresome or difficult to follow than a review of literature that is merely an accumulation of quotations.

MATHEMATICS ACHIEVEMENT OF POOR CHILDREN
IN AN URBAN SCHOOL IN SARAWAK

EVY SOFIAH ISMAIL

A dissertation submitted in partial fulfilment
of the requirement for the degree of
Master of Education

Faculty of Education and Languages
Open University Malaysia

2008

Figure 10.3: Example of a title page

(iii) **Topic 3: METHODOLOGY**

This topic explains the design of the study in detail.

- **Sampling:** It is here that you explain the size of the *samples* and how you selected them. Indicate the extent to which the sample is representative of the population. Did you use random sampling? Did you use stratified sampling?
- **Setting:** If you are doing a qualitative study, you have to explain in detail the setting, the characteristics of your subjects, how you gained access or entry to the setting and your role in the study (e.g. observer, participant observer).
- **Instrumentation:** You should include a description of the data collection techniques or instruments you used. For example, if your study is a survey you have to explain how you design and developed the questionnaire or interview checklist. Explain the number and types of items included in the questionnaire. If you had used attitude scales, achievement tests and other psychological tests; you have to give evidence regarding the reliability and validity of the instruments. You may also describe the scoring procedures adopted for the instruments used.

(iv) **Topic 4: ANALYSIS OF DATA**

In this topic, you present the findings of the study after having processed and analysed the data. This is the heart of the research report. If you are doing a qualitative study, tables and graphs are commonly used to organise and present numerical data. Tables and graphs are useful in presenting an overall picture of the data as well as showing trends that have emerged from the analysis. If you did a quantitative study, there would be less numerical data. Instead your data would consist of concepts, categories or themes which may be presented in table form. You would also be presenting data in the form of anecdotes or excerpts of interviews, observations and form documents to support your arguments. You are advised to refer to the *Journal of Educational Psychology* and *American Educational Research Journal* to see how tables and graphs are presented and explained. For qualitative studies, *The Qualitative Report* is a useful journal which presents reports of qualitative studies in education, nursing and medicine.

(v) **Topic 5: DISCUSSION AND CONCLUSION**

The last chapter comprises of two parts. The first part includes: a brief summary of the problem, methodology and results. Focus should be on a summary of the findings and it should be as brief as possible. Some researchers present the main findings in the form of list. The second part is

a discussion of the findings. Here, you identify and interpret the findings. You give possible reasons why the results occurred. You could provide reasons by referring to the findings of previous research (*This is where the studies cited in Topic 2 are useful*). Because you are the one who conducted the study, you have a deeper understanding of the study compared to most readers you are expected to discuss the findings and to give your own opinion. One of the most common weaknesses found in the writing of graduate students is that their reports present important and interesting findings but fail to provide a thoughtful interpretation of the findings. On the other hand, there is the tendency for beginning researchers to overgeneralise on the basis of their limited data. Remember, your study is not attempting to change the whole education system! For example you could the following comments about your report:

“Your study to this point has been good.
Your summary is disappointing.
be true, but there is nothing in you study
to justify or support your conclusions”.

You should keep in mind that this chapter is the most used part of the research report by other readers. Readers who scan research literature to find significant studies examine this chapter before deciding whether or not further examination to the report is worthwhile reading.

(c) **Reference Materials**

This section of the report comprises the References and Appendixes (if any). References are arranged in alphabetical order with the last name of the author listed first. Here you would include journal articles, books, chapters in books, monographs, reports, newspaper articles you have cited in the report. The common mistakes with the Reference section are:

- (i) You had cited an author in the report but it is not listed in the References and vice-versa.
- (ii) The method of referencing does not follow a consistent format (In education, the format used is by the American Psychological Association – APA format).

The appendix is indicated by the word APPENDIX, capitalised and centred on the page. The first page of the appendix is title APPENDIX A followed by APPENDIX B and so forth. What may be included in the appendix?

- (i) Tables and data – important, but not essential to the understanding of the report.

- (ii) Copies of cover letters used, and printed forms of questionnaire, tests and other data –gathering devices.
- (iii) Item-analysis data and other materials pertinent to measures.
- (iv) Scoring procedures.