

# SCHOOL OF PUBLIC HEALTH

## PhD Thesis Guide

### **Structure and approach**

There are two ways of writing a thesis in the School of Public Health: a traditional style which will follow the format below, or by publication. Further information on writing a thesis by publication is available from: [http://www.chs.usyd.edu.au/PG/Thesis\\_by\\_pubs.pdf](http://www.chs.usyd.edu.au/PG/Thesis_by_pubs.pdf)

If your thesis is not a collection of related and linked publications, then it will usually include the following elements. (If your thesis is not based on empirical research, but is a theoretical discussion or policy analysis, for example, these headings may be inappropriate. In such cases it is particularly important to state specifically the theoretical framework in which you are working and to give the reader a guide to the structure of your argument.)

### *Introduction and/or background*

This section or chapter serves to introduce the subject of your thesis to the reader and to discuss the reasons or justification for the work. Usually the aims or central question(s) of the project will be presented and discussed. This section may also include a literature review, or describe the events leading up to the project.

### *Methods*

The methods of your study must be documented in detail, dealing with sampling issues (description of target population, method of sample selection, sample size), the study procedure (a flow diagram may be useful), measurement issues (details of how each variable was measured, justification of choice of measurement instruments) and data analysis methods. You should discuss any methodological problems such as sources of bias, repeatability and validity of measurements, and logistic problems.

### *Results*

The results section should include a presentation of response rates, a description of the study population, descriptive statistics of other variables, results of tests of hypotheses and other statistical analyses. In a formal thesis there may be more than one chapter of results, depending on the design of your study and the number of research questions or hypotheses that you are examining. Where there is only one results section or chapter, you may wish to discuss and interpret the results in a separate discussion section. Where there are several results chapters, the results may be interpreted and discussed at the end of each chapter. Try to avoid any discussion of the results when you are presenting them.

### *Discussion*

In this section the results are interpreted and discussed. The limitations of the methodology should be kept in mind and referred to where appropriate. Usually, the discussion should include an examination of the practical implication of the results. Try to avoid making sweeping or dogmatic statements about your results.

### *Conclusions and recommendations*

It is essential to have a summary or concluding section. Often it will be appropriate to make recommendations based on your findings and these may also be included in the final section.

### *References*

Part of what you are being tested on when you write a thesis is your ability to relate your work to that of others in the field and to acknowledge your indebtedness to earlier researchers. You must give a reference to all sources cited in the text. There are two main reasons for giving a reference: (1) to allow the reader to find a source which you are quoting or paraphrasing, and (2) to support a claim of scientific fact.

There is no need to support claims for universally accepted statements, trivial points or matters that you have observed yourself. To support a claim, you should refer to a study that investigated and demonstrated the point in question, or to a reputable review or meta-analysis of studies of the question. Making reference to other people's unsubstantiated opinions does not support a claim. Avoid using abstracts, unpublished observations or personal communications as references to support claims.

If you use someone else's ideas or words (whether paraphrased or quoted in full), give a full reference that would enable the reader to find the source. Failure to do this is plagiarism. Nor is it acceptable to copy passages of someone else's work and present it, either verbatim or slightly altered, as if it were your own writing, even if you acknowledge the source at the end of the paragraph. Summarise or paraphrase it briefly *in your own words*. (See also page 4 under '*Quotations*'.)

### *Bibliography*

If necessary, you may also include a list of other works you have consulted but not cited.

### **Document preparation**

If you require advice and/or assistance with preparing your thesis for submission, SUPRA maintains lists of Binders, Proofreaders and Editors, and Typists. If you would like a copy of one of these lists or would like to be added to the list please call 9351 3715 or email [admin@supra.usyd.edu.au](mailto:admin@supra.usyd.edu.au).

### *Paper*

Print on A4 paper on one side of the page only. The final bound copy of the thesis submitted to the University, once approved, must be on acid-free paper.

### *Margins*

Leave margins of 4 cm on the side where the binding is and 2.5 cm on the other three sides. Page numbers should appear in the margins, at least 1.5 cm from the edge of the paper. If you reproduce questionnaires etc. in the appendixes, you may need to reduce them to make the margins wide enough.

### *Type style*

The type style you choose for your thesis is a matter of personal choice. A common style is a 'serif' face, like 'Times Roman' in 12 point with 1.5 spacing between lines. Whichever style you choose, you should ensure that it is clear, easy to read and consistent throughout your thesis.

If you justify the right-hand margin you will occasionally need to hyphenate long words; make sure you know how to do this consistently and correctly. Displayed quotations and references may be in slightly smaller type and/or spaced less widely.

### *Cover*

Fix a label to the cover clearly identifying it as an examination copy only, and giving your name, the title of the thesis and the year of submission.

### *Binding*

The thesis should be presented for examination in a temporary binding so that if emendations are required they can be incorporated before permanent binding as a hardback book. This temporary binding should be strong enough to withstand ordinary handling and postage. Examples of temporary binding include: spiral binding and plastic comb binding. Spring-back folders and ring binders are not acceptable.

The degree will not be awarded until after the receipt of the approved final hard-bound copy of the thesis for the University Library.

### *Number of copies*

Four examination copies of a thesis must be submitted.

### *The parts of a thesis*

- title page
- abstract or summary
- acknowledgments
- note on the author's contribution
- table of contents
- list of tables
- list of figures
- list of special names or abbreviations
- main text
- references
- appendix(es)

### *Title page*

The title page should include the title of the thesis, your name, the month and year of publication, and the statement 'This thesis is submitted in partial satisfaction of the requirements for the Degree of Master of Public Health [or Master of International Public Health, Master of Medicine, Master of Science in Medicine as appropriate] with Honours, University of Sydney.' (*partial* because the other requirement is coursework.)

### *Abstract or summary*

This should preferably fit on one typed page and should be about 300 words long. State the purposes of the study or investigation, basic procedures (e.g. selection of study subjects and observational and analytical methods), main findings (specific data and their statistical significance, if possible) and the principal conclusions you have drawn from the findings. Do not use headings within the abstract, but do follow the structure of the thesis itself.

The abstract should be a highly condensed version of the central reasons for your study, your methods, results and conclusions. It should not be a description of your thesis or an advertisement or apology for it - do not dwell on how remarkably original or successful your study was, or on the mishaps that prevented you from coming up with more representative results. Do not use phrases like 'The implications of these findings for heart disease prevention programs are discussed', or say that further work needs to be done (it always does). Instead state the main implication for prevention programs, treatment etc. in one bald sentence. Do not forget to say when and where the study was done. Do not report any information or opinion that is not in the thesis itself. The abstract should not have any footnotes or references to the literature, or any tables or figures.

### *Acknowledgments*

It is courteous to acknowledge anyone who has given you assistance (financial, practical, emotional or academic), and especially to cite those who designed the project or carried out the data collection if you were not involved at those stages.

### *Note on the author's contribution*

If you were not involved at all stages of the research project, or if major decisions affecting your work were made by other people, you should make clear exactly what your role was.

### *Table of contents*

List the chapters or sections, subheadings and appendices, with page numbers. (Do this *last*, after you have printed the chapters.) Start with the introduction; omit the prefatory matter, such as the dedication, preceding the contents list.

Look at some published books for examples of setting out. If your sections are not numbered you can put the page numbers on the left, before the section titles, which avoids either large gaps between section titles and numbers, or long lines of leader dots. If your contents list comes to more than two pages it is probably too detailed. Omit minor subheadings to make it a more useful size.

### *Lists of tables, figures and illustrations*

Make sure that the titles appear exactly as on the tables and figures themselves.

### *List of special names or abbreviations (if appropriate)*

If there are special terms used in the text, or common terms used in a special sense, or many abbreviations, it is helpful to list and explain them here. However, it is easier for your readers if you use as few abbreviations in the text as possible, except for very common ones such as NSW or AIDS.

### *Main text*

Begin each chapter on a new page. Make sure you are consistent about the use of numbering or different type styles (such as bold and italic or underlined) to indicate levels of headings. Avoid footnotes; put parenthetical matter in the text or in an appendix, or omit it altogether if it is inessential.

### *Quotations*

Avoid long direct quotations in the text unless the exact form of words used by the author is essential to your argument. Short quotations (less than two or three lines) should be enclosed in quotation marks. Decide whether you want single or double quotation marks and stick to your rule throughout (whether you are quoting someone's words or using quotation marks merely to emphasise a word or phrase, or to qualify your use of it). The only exception is for a quotation within a quotation, when you switch style, i.e. if you are using single quotation marks; the inner quotation has double quotation marks around it.

Quotations longer than two or three lines can be displayed, i.e. set out with a blank line above and below, indented, more narrowly spaced and perhaps in smaller type. Do not use quotation marks in displayed quotations (unless there is a quotation within the quotation).

Quoted material should be *letter-for-letter* the same as the original. If there is an error in the original that might be confusing to your reader, add the word 'sic' in parentheses after it. If you omit any words from the original, indicate the omission with three dots (. . .); there is no need to use three dots at the start or end of a quotation unless for some special reason you need to emphasise that your extract begins in the middle of something. If you add words of

your own, either in explanation or to adjust the grammar of the quotation so that it fits into your own sentence, enclose the interpolated words in square brackets.

### *Tables*

Tables should be as simple and clear as possible. For a formal thesis, you may provide fuller, more complex tables than you would normally use for other publications such as journal articles. Very large tables can be included in an appendix, and simpler tables or graphs used in the body of the text to display summary information.

Tables may appear

- at the appropriate point in the text
- on a separate page in the text after the page referring to the table
- in a separate section at the end of the section or chapter.

The first system is easiest for the reader, but may pose problems with large tables breaking over the ends of pages or creating almost-blank pages beforehand if you use 'block protect'. The third system is least convenient for the reader.

The title of the table should tell what the data represent: who, where, when and what. The source of any data not your own should be indicated in a footnote under the table. Further guidance on tables and graphs is given in the Introductory Biostatistics notes published each year by the School.

### *Figures (diagrams)*

Keep graphs simple and avoid arty computer graphics such as unnecessary shading, confusing diagonal hatching or three-dimensional effects.

### *Lists*

Lists can be incorporated within a sentence, introduced by a colon, with the items separated by commas. If individual items contain commas the items may be separated by semicolons. If the list is set out vertically there is no need for punctuation at the end of each item. Be consistent about the style you use for set-out lists - do not switch from bracketed numbers to unbracketed numbers, or to bracketed letters, 'bullets' (●) etc. Bullets are preferable to asterisks or dashes for lists where no order or hierarchy is intended.

### *References*

There is a large range of acceptable referencing styles, but we recommend that you choose either 'author-date' or 'Vancouver' style, unless your subject matter requires a different style (e.g. for legal cases). See the School's guide on Referencing Styles for detailed guidance ([http://www.health.usyd.edu.au/current/coursework/referencing\\_styleguide.pdf](http://www.health.usyd.edu.au/current/coursework/referencing_styleguide.pdf)). Use of footnotes is not recommended.

### *Appendixes*

Information not required in the text itself but relevant to the thesis may be included in an appendix, for example questionnaires, detailed tables on which graphs in the text are based, or the grant proposal for the study (if appropriate).

### **Further questions?**

If in doubt, ask your supervisor. More guidance on practical issues is given in the booklet *The Thesis Guide*, available free to members of SUPRA or obtain it on-line from the SUPRA website:

<http://www.supra.usyd.edu.au/>

Juliet Richters, April 1995. *Updated August 2006*

