Overview of workshop

- Scope of the research report
- Types of research reports
- Structuring the research report: issues and considerations
- Reviewing the literature: developing an argument
- Methods: describing what you did
- Discussion: discussing your findings and contribution
- A word on writing abstracts
- Questions (Dr Catherine Bennett) and discussion, evaluation

My teaching goals for this workshop...

- To move you ahead in your thinking and preparation for writing your research report
- To clarify issues to do with writing the research report, and develop your understanding of the report’s structure and scope
- To establish some research networks amongst participants
- Provide opportunities for discussion

Types of research reports

- The development of a research protocol (no data analysis)
  - A protocol development for AIDS prevention among secondary school students in Liangshan Yi ethnic group autonomous region, Sichuan Province, China
  - A clinical trial of recaldent™ in Tooth Mousse™: Development of a research protocol
- Analysis of existing data
  - The sexual and reproductive health care needs of males with cystic fibrosis
  - Strongyloidiasis in Cambodian immigrants and refugees in Victoria
- A literature review
  - Effective elements of school-based life skills programs for HIV prevention in Myanmar: A literature review
- A meta-analysis
- Others?

Scope of the research report

- How do research reports differ from PhDs, Masters by Research and Minor theses?
  - tend not to include data collection
  - smaller in scope in terms of length of the report, the issue/area investigated, and the degree of originality expected.
- What do research reports have in common with higher degrees by research?
  - similar structure: Introduction, Methods, Results, Discussion
  - similar purpose, i.e. persuade the reader (the research community) that the research is important, make recommendations
  - similar approach: critical and analytical approach to the literature and discussion

Describing your research project

- What type of project are you working on? (according to the descriptions from the previous slide)
- What is your data?
- Burning questions??
General structure of a thesis

- Introduction: provides the background to the research or the motivation for the study, an overview of the research design, the research questions and goals of the study (as well as an overview of the chapters)
- Methods: methods chapter informs the reader how the study was carried out. It can include sub-sections that explain how the sample was established, how the data were analyzed, the research design, and the tools used to carry out the research
- Results: the findings chapter or section(s) reports on the results of your research. The findings should be presented so that they relate to what was described in the methods section of your thesis.
- Discussion: tells your readers what the results mean. The writer interprets the results presented in the previous chapter and does so in light of the research discussed in the literature review. The results should also be interpreted with reference to the research questions or hypothesis presented in the introductory chapter.

Issues with structuring types of research reports

- What do you think may be an issue when writing a literature review research report in an IMRD structure?
- What do you think could be an issue when writing a protocol development in an IMRD structure?

Suggested structure of research reports and actual structures (1)

Protocol development
- Introduction (Summary of background and research methods)
- Background (Rationale, how will this add to existing knowledge, statement of issues relevant to the design of research protocol e.g. selection of subjects, analysis etc.)
- Methods (How design will be decided on, Identification of different methods and consideration of different methods)
- Results (Protocol design and justification of design aspects)
- Discussion (How well this design will address the issues identified in the background)
- Conclusions, References

Suggested structure of research reports and actual structures (2)

Literature review
- Introduction (Summary of background and research methods)
- Background (Why this review is important, how it differs from other relevant reviews)
- Methods (Statement of issue to be reviewed, methods of identifying and locating research, method of review of research)
- Results (Analytical findings including tables and figures)
- Discussion (Interpretation of findings in context of background)
- Conclusions, References

Suggested structure of research reports and actual structures (3)

Analysis of existing data
- Introduction (Summary of background and research methods)
- Background (why this analysis is important, how and why the data was collected, specifics of data)
- Methods (Methods for accessing data, cleaning data, preparing data for analysis, statistical methods used)
- Results (Analytical findings using tables and figures)
- Discussion (Interpretation of findings in context of background)
- Conclusions, References

Some questions:

- Do you think most PhDs fit within this general structure of IMRD?
- What about the literature review? Where does it go?
- In terms of general and specific, how would you describe the scope of each thesis chapter? (i.e. IMRD)
- Do you think your research report will fit within this general structure of a thesis?
- How many chapters do you think your report will have?
Reviewing the literature

Purpose
- The literature review has a twofold purpose. It contextualises your project as well as indicates a gap in the current research – a gap which your research is designed to fill.
- In order to establish a research space, the writer needs to convince the reader of the importance of the research that he or she is investigating. (task)

Structuring the literature review
- The literature review is much easier to write (and read) if it is sub-divided into sections
- The literature review should also clarify and discuss some of the conceptual issues relevant to your topic. It should also be related to the aims of the research stated in the previous chapter.
- What type of sub-headings would you have for a thesis on the following topic?
  - Evaluation of health practitioners’ understanding, knowledge and attitudes towards cerebral palsy in Bangladesh
  - (brainstorming from other disciplines)

Writing the methods: what you did

Purpose
- The methods chapter describes what you did. It can include sections that explain data collection procedure, equipment used, as well as the procedures that were followed.
- The focus on describing how the research was carried out has implications for the writer’s language choices. Writers tend to use the past tense combined with the passive voice to describe the steps in the research process. The passive voice foregrounds what was done rather than who did what.
- Methods sections are rarely just straightforward descriptive accounts. Frequently they address shortcomings with the procedures and explain how the researcher compensated for these shortcomings.

Writing the methods for a literature review

Things to consider:
- Databases searched (all)
- Keywords: how were they used?
- Inclusion and exclusion criteria
- Was additional literature sought?
- How was the literature analysed?
(How are these aspects incorporated in the excerpt?)
Discussion and conclusion (1)

Purpose
The concluding chapter provides a summary of the findings, and discusses the consequences or implications of the research. The conclusion will refer to the initial research question and hypothesis. It points out the limitations of the project. It also makes recommendations, and suggests further research.

Discussion and conclusion (2)

- How have MPH writers organised their concluding chapters?
  - What sub-headings have they used?
- Persuasion and argument are important elements of the concluding chapter. What persuasive language is evident?
- What sort of recommendations are made in the concluding chapter?

Discussing the limitations of your project

It is important to make appropriate claims when discussing the implications of your research; therefore it is necessary to point out the limitations. Some useful phrases are:

- It should be noted that this study has examined only.....
- This analysis has concentrated on...
- The findings of this study are restricted to...
- This study has addressed only the question of...
- The main limitations of this study are....(Swales & Feak, p.202)

However, you don’t want to sell yourself short! How can you counterbalance these claims?

Discussion

- Discuss with people in your group the main findings, implications and limitations of your research. (or what you expect the main findings will be?)
- How will you counterbalance the limitations?

Strategy for learning (outside of this workshop)

Read other research reports and focus on the Discussion and Conclusion sections

- What sub-headings have the writers used?
- Persuasion and argument are important elements of the concluding chapter. What persuasive language is evident?
- What sort of recommendations are made in the concluding chapter?

A note on writing the abstract...

Purpose and structure of the abstract

The abstract is more or less a summary of research completed. The abstract should capture an audience's attention by establishing a research space or niche early on the abstract, and highlighting the importance of the research. The abstract may also have a catchy and informative title. The rest of the abstract tends to include a brief methods section, followed by a results section and implications.
The structure and purpose of the abstract continued...

Task: answer these questions about the sample abstract *A clinical trial of recaldent™ in tooth mousses™: development of a research protocol provided in your handout*

- Identify the various sections of the abstract (i.e. Introduction, Methods, Findings, Discussion/Implications)
- Comment on the length of the divisions of each section. Do you think this would differ for a literature review project?
- Circle all instances of evaluative language to strengthen the case for the acceptability of the research.
- What tenses are used in this abstract (e.g. present? past?)

Questions and discussion