Postgraduate Literature Review Process

Adapted from presentation by Dr. Derek Richards & Dr. Mark Matthews

Workshop Overview

- Examine the elements of conducting a literature review
  - Formulating the question
  - Identifying the literature
  - Critically evaluating the literature

Why do a literature review?

- Determine what has already been written on a topic
- Provide an overview of key concepts
- Identify major relationships or patterns
- Identify strengths and weaknesses
- Identify any gaps in the research
- Identify any conflicting evidence
- Provide a solid background to a research paper’s investigation
- From https://www.citewrite.qut.edu.au/write/litreview.jsp
A literature review is a descriptive, analytic summary of the existing material relating to a particular topic or area of study. The literature review process involves an examination of prior scholarly works.


Readers need to be able to judge whether the relevant literature is likely to have been found.

You need

1. A clearly formulated question
2. System for identifying relevant literature
3. Critical appraisal of relevant research
Formulating a Problem

A Research Question should be:

- Specific
- Focused
- Clearly formulated
- Well defined

Ask questions of the question!

In groups, discuss following thesis titles

1. Why are social networking sites harmful Vs
2. How are online users experiencing or addressing privacy issues on such social networking sites as MySpace and Facebook?
3. What is the effect on the environment from global warming Vs How is glacial melting affecting penguins in Antarctica?

Research Question Examples

Why are social networking sites harmful?

- Doesn’t specify which social networking sites
- What kind of harm the sites are causing.
- Assumes that this “harm” is proven and/or accepted.

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Research Question Examples

How are online users experiencing or addressing privacy issues on such social networking sites as MySpace and Facebook?

- Specifies sites (MySpace and Facebook),
- Type of harm (privacy issues)
- Who the issue is harming (users).

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A strong research question should never leave room for ambiguity or interpretation.

Research Questions Examples

What is the effect on the environment from global warming?

So broad that it couldn’t be adequately answered in a book-length piece, let alone a standard college-level paper.

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How is glacial melting affecting penguins in Antarctica?

- narrows down to a specific cause (glacial melting),
- a specific place (Antarctica)
- a specific group that is affected (penguins).

When in doubt, make a research question as narrow and focused as possible

Example of well defined question

Computer-based psychological treatments for depression: A systematic review
Your turn!

Formulating a Problem

Take a few moments to write down your research question.

Exercise

Take a few minutes to interrogate your topic. Is it:
- Specific?
- Focused?
- Clearly formulated?
- Well defined?

Ask questions of the question!
Once you have defined your question, you need to look for the relevant literature

What are some of the challenges in conducting literature reviews?

Challenges in Conducting Literature Reviews

- Knowing where to start, (e.g. wide then narrow, or narrow then wide?)
- Knowing what to include
- Knowing when to stop literature searching
- Knowing how far to venture into the literature of associated domains
Identify the Research

1. Defined search terms
2. Defined search arena
3. Other broad search limits, e.g. language, date, population

Selection of Literature

Inclusion and Exclusion Criteria - related to your research question

Develop inclusion or exclusion statements, these might relate to study outcomes, research design, methods used, population worked with etc.

E.g.
- studies with a mixed population of men and women,
- only random control trials,
- maximum exposure time of 10 mins
- urban/rural

How much literature?

- Finding too much –
  - Rethink search criteria?
  - Rethink question?

- Not finding enough
  - Broaden search terms?
  - Look in other places?

Subject Librarian can help
After finding the literature

You need to critically evaluate it

Critical evaluation of the literature

- What are the key terms and concepts?
- How relevant is this article to my specific topic?
- What are the major relationships, trends and patterns?
- What methodologies are used?
- How has the author structured the arguments?
- How authoritative and credible is this source?
- What are the differences and similarities between the sources?
- Are there any gaps in the literature that require further study?

From: https://www.citewrite.qut.edu.au/write/litreview.jsp

Organise your information

- A spreadsheet can be useful to organise the information and compare different readings
Critical evaluation of literature

<table>
<thead>
<tr>
<th>Description</th>
<th>Analytical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Describes what others have found without stating what these findings mean for your investigation. Usually a chronological list of who discovered what, and when.</td>
<td>Synthesises the work and makes a critical judgment on the empirical studies of research conducted in your field. Reveals limitations or recognises the possibility of taking research further, allowing you to formulate and justify your aims for your investigation.</td>
</tr>
</tbody>
</table>

For example:

- Green (1975) discovered ...
- In 1978, Black conducted experiments and discovered that ...
- Later Brown (1980) illustrated this in ....

For example:

- There seems to be general agreement on x, (see White 1987, Brown 1980, Black 1978, Green 1975). However, Green (1975) sees x as a consequence of y, while Black (1978) puts x and y as .... While Green's work has some limitations in that it ... its main value lies in ....

(Examples taken from University of Queensland: Writing the literature review)

3. Critical appraisal of studies

Model to Generate Critical Thinking

- Description
- Analysis

Learning Development, University of Plymouth
Comprehensive Literature Review

Source: Dr Hazel Hall, Napier University

Video of literature review

https://www.youtube.com/watch?v=t2d7y_r65HU

SLD

Literature review resource

http://libguides.utoledo.edu/litreview/home
Manchester Phrasebank – useful resource

http://www.phrasebank.manchester.ac.uk/compare-and-contrast/

Write up literature review – Structure

Diffs between schools

Introduction/Background
Purpose/Research question
Methodology
Findings
Discussion
Implications/Recommendations

Ask your supervisor

SR websites

Centre for Evidence-based Conservation - http://www.cabcs.bangor.ac.uk/
Centre for Reviews and Dissemination (medical) - http://www.york.ac.uk/inst/crd/index.htm
Cochrane Collaboration (international - medical) - http://www.cochrane.org/
EPPI-Centre, Institute of Education - http://eppe.ioe.ac.uk/cms/
Social Policy and Social Care - http://www.york.ac.uk/inst/chp/srspsc/index.htm

If you read one article, an example here of a review of the ways studies in reviews are appraised - http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=521688

If you prefer power-point, how about this one on mixed method reviews - http://www.ccsr.ac.uk/methods/events/challenges/documents/JamesThomasESRCMethodologyChallenges.ppt