



Writing your successful literature review

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Introduction

Literature reviews are undertaken by academics and students to collate, analyse and critique the ideas and arguments presented in a range of research studies in order to understand where research boundaries are located, to identify areas where knowledge is missing or contested, and where future research may be undertaken.

Literature reviews are set as student assignments in a variety of modules to broaden understanding of particular research topics and to enable students to practice critically appraising ideas and arguments. Being comfortable with appraising and synthesizing ideas is a fundamental skill which is core to successful longer projects, dissertations or independent studies, where the literature review sets the framework and provides the context for the research. Whatever the situation, being able to assimilate information and present a good argument in your report is a skill that employers value.

This Directions outlines the key features of a literature review and the characteristics of a successful one, in the context of preparing your geography project or dissertation. The general principles apply to all literature reviews.

Approaching your literature review

Keep reminding yourself that a literature review provides a comprehensive overview of relevant literature (Hay, 2009). Start by reading literature reviews in journals, and if possible a couple of projects or dissertations submitted by previous students to your department (Hay, 2009; Kneale, 2012). These examples should help you to understand the style and content required, which will help you to plan your writing. When reading literature reviews ask yourself if the writer is persuasively, and logically, showing where more research is required.

Discussing your ideas and the draft questions you are proposing to research with your supervisors is crucially important (Cottrell, 2013; Hay, 2009). They are likely to ask questions you cannot answer immediately, but which will help you to think more deeply about your

topic. They can help you identify the main authors and keywords which will focus your online and library literature searches.

Burkill and Burley (1996) recognized that it often difficult to know where to begin; or indeed what material to use and whether to start with keywords or with authors. A keyword search will identify the academics and the writing that is important for your study. Keep a list of the keywords and phrases handy, and add to them as you read. This will help you to search the literature in a systematic and logical manner.

There are two main tactics for searching – being systematic and snowballing. Using the systematic approach, all the articles with a relevant search term (rural England, flooding, migration) in the title or abstract are identified. However, this approach can lead to long lists of all possible sources, which rapidly become unmanageable. Snowballing is more organic. Here you identify a particular paper and build a bibliography of articles to follow up through using the reference list (Ridley, 2012). Whichever approach you adopt (most people combine the two), it is vital to identify where the paper has been cited and to keep an accurate record. Online searches show where a particular paper has been cited by later authors. In principle, you can assume that if a paper or idea is regularly cited, then other academics are considering that it is significant in some way.

The primary expectation is that arguments are critiqued within the context of relevant academic theories. Recent publications and journal articles are likely to be the first port of call. Where policy and practice is considered the "grey" literature, policy documents and case studies will be important (Burkill & Burley, 1996). These may include government and non-government organization reports, policy organization reports, planning documentation, and opinion pieces. Discuss with your tutor how the examiners for your work are likely to view the acceptability of different types of literature, so that you do not create an unbalanced report.

Most searches start online, but be aware of the reputation of your sources. Academic journal articles should be OK. Be critical of non-academic literature, opinion pieces and reports. Ask your University library staff for advice on searching specialized databases using relevant keywords.

Once you have completed this first stage of searching the next stage is to read. What follows is an iterative cycle of activity as new reading leads you to new authors, new papers and new ideas.

Reading for a literature review

Expect to read and make notes from many more articles than you actually use because you need to consider the broader evidence in order to pick out the relevant items to support your own research. Start by reading the abstracts; this will help you to decide which papers are relevant. In your final report, you may briefly indicate areas of research that you have considered and rejected from detailed consideration. The relevant sources may be cited in a short paragraph or table, but do not overdo it, you need most of your word count for the main story.

When you get to the detailed planning stage of your dissertation or thesis you should have read many academic articles and developed effective reading strategies. Use the approach that works for you, planning plenty of time to read a significant amount of material. It can be useful to adopt a systematic approach to your reading such as SQ3R (Kneale, 2012). This suggests you;

Survey – Take your source and re-read the title to make sure it is relevant to your study. Is it a recent paper? Scan the introduction and conclusion. If you do not think it is relevant at this stage, save it to a separate folder and move on. Note: do not delete the source; it may become useful later as your research ideas evolve.

Question – Ask yourself questions about the paper. Be clear what you are asking, what you already know and what you want to find out from the source. The paper may be relevant for deep and active reading with note taking, or appropriate for scan reading to add to existing background notes.

Read – Be selective. You may not need to read the detailed methodology or every page in a chapter. It is best not to make notes the first time you read; it is important that you identify the main argument(s) and idea(s). It is on the next reading that you make notes and include the detail that you actually need for this particular project.

Recall – Reading an article once or twice is not usually sufficient to be sure that you understand what you have read. Take a break and return to the article, re-read your notes and then try to explain the article in your own words.

Review – having recalled the content in your own words, re-read the article to check that you have understood the information, and not missed anything. Make links between the sections of your notes and items you have read. Highlight whether they support or contradict a point of view.

Although SQ3R may appear long-winded, the key to a good literature review is effective, critical and active reading. Note the really important ideas, you do not need all the details in most cases. Most reviews will cover too much material to remember it all. It is therefore vital to link one source to another, for example noting articles with similar methodologies; results that agree; or outcomes that are contradictory. Mind maps can help here. Kneale (2012, p. 69) summarizes strategy that may help:

- Copy the reference in full and the library location/online link so you can find it again. This information is required for your reference list or bibliography. Searching for citation information just before submission deadlines is hugely frustrating;
- Summarize in two sentences what [the article] is about;
- Summarize the conclusion in one sentence;
- Identify the strong points of the article, and highlight in your notes;
- Ask yourself "Is this an argument/case you can agree with?"
- Ask yourself how this information fits in with your current knowledge?
- Ask yourself what you need to know (read) next to advance your understanding of this topic?

After reading, take some time to sort your notes into sections for different themes, so that you can easily find them when you write. Cottrell (2013) suggests colour coding your notes or using different folders. You need a filing process that works for you. Having managed your notes, the next stage is to begin to drafting your review.

Structuring your literature review

The reader needs to be able to follow your logical working through of a set of ideas and considerations to reach a coherent conclusion. As your ideas and knowledge develops, the

structure of your review will evolve, and change again as you continue to read, research and write through the project.

It is helpful to start with subheadings, but be flexible in changing them as your ideas emerge. Academics will tell you they reorder paragraphs to test that the argument is presented in the most helpful way for the reader to understand. Check whether sub-headings are accepted in final submissions; see your module project or dissertation guidance notes, or ask your tutor (Hay, 2009). You may find it easier to write using sub-headings and remove them later. Whether or not you use sub-headings, it is important that your paragraphs flow. Use linking (transition) words; see for example Morley (2016).

There are no rules about what to include, or the order for presenting material. Diagrams, pictures and tables may be relevant. Generally, you set out the background and then discuss the relevant research evidence in a way that leads to a clear rationale for your research. Cottrell (2013) and Hay (2009) suggest this might involve:

- · Background;
- Description of the methodology you used to search the literature (systematic, snowballing, combination) and main sources, although not all departments require this information;
- Introduce the important, influential research material;
- Sections that address each of the themes developed and discussed later in the project report. Make sure that each paragraph is relevant to the overall research. It is easy to go off on a tangent, especially if there is no word limit;
- A synthesis section, which should include the principal outcomes, note the gaps in knowledge that you and others have identified together with possible research questions that arise. Keep your discussion of these important additional questions brief, in order to focus properly on the specific research question you are addressing.

After the initial drafts

Once you have set out the clear rationale for your project you can design the research methodology. There are clear links to be made between the literature review and the methods chapter when you decide to replicate or to reject the particular techniques, methods or approaches of previous researchers. If you decide to use a method which is outside the norm for studies in this area so far, you will need to say a little bit more about your chosen approach and its academic validity. That may mean reading material from other subject areas or disciplines. For example, if you decide to take a standard economics or psychological method approach to a geography problem then some reference to the economics or psychology literature will be important.

Every project raises new issues as it evolves, which may mean adding another theme or section to the literature review. Equally parts of the literature review that seemed really crucial at the start, are no longer needed. Be ruthless in cutting out the sections that do not tie into your project. It is painful, but it will help the word count and make it easier for the reader to understand your approach and arguments.

It is absolutely normal to complete the discussion and conclusion sections of a report or dissertation and then to go back and finalize the literature review. Then you finalize the first section so that the introduction properly introduces what you actually did rather than what you expected to do. Ask yourself if you have considered in a balanced and thoughtful way the strengths and weaknesses of the existing theories, ideas or practices, especially those written by significant academics in your field (Cottrell, 2013).

Conclusion

A project or dissertation literature review provides the context for your independent research, clearly setting out gaps in existing knowledge and providing a rational explanation for exploring your research questions. It is important to be aware of the larger academic setting, as well as the detail needed for your project. Be prepared to read generally using academic and wider sources, and go beyond the geography literature. Many geography projects range more widely, providing illustrations or applications for your research, as well as support or challenge to your academic argument.

In addition to the References cited here, there are many books, study guides and online resources providing guidance on dissertation and project work, including use of the literature. Do not forget to refer to your module and departmental guidance too.

Give yourself time, a couple of days at least before submission to check the assessment guidance for your module or programme, (word length, structure suggestions, the use of sub-headings, citation style) ask if you are confused, and polish up your writing. Then re-read the literature review and the later sections to make sure they link up. Ask yourself if you have provided a considered, comprehensive and persuasive context for the research topic.

Overall, a good literature review requires you to give yourself the space to grapple with enough ideas, and to realize what you think, and where ideas fit in your scheme of research. Give yourself enough time.

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