

## **Student Learning Development**

# Doing a literature review

This Study Guide explains why literature reviews are needed, and how they can be conducted and reported. Related Study Guides are: Referencing and bibliographies, Avoiding plagiarism, Writing a dissertation, What is critical reading? What is critical writing?

The focus of the Study Guide is the literature review within a dissertation or a thesis, but many of the ideas are transferable to other kinds of writing, such as an extended essay, or a report.

#### What is a literature review?

The ability to review, and to report on relevant literature is a key academic skill. A literature review:

- situates your research focus within the context of the wider academic community in your field;
- reports your critical review of the relevant literature; and
- identifies a gap within that literature that your research will attempt to address.

To some extent, particularly with postgraduate research, the literature review can become a project in itself. It is an important showcase of your talents of: understanding, interpretation, analysis, clarity of thought, synthesis, and development of argument. The process of conducting and reporting your literature review can help you clarify your own thoughts about your study. It can also establish a framework within which to present and analyse the findings.

After reading your literature review, it should be clear to the reader that you have up-to-date awareness of the relevant work of others, and that the research question you are asking is relevant. However, don't promise too much! Be wary of saying that your research will *solve* a problem, or that it will *change practice*. It would be safer and probably more realistic to say that your research will 'address a gap', rather than that it will 'fill a gap'.

## Why do I need a literature review?

When readers come to your assignment, dissertation, or thesis, they will not just *assume* that your research or analysis is a good idea; they will want to be *persuaded* that it is relevant and that it was worth doing. They will ask questions such as:

- Q What research question(s) are you asking?
- Q Why are you asking it/them?
- Q Has anyone else done anything similar?
- Q Is your research relevant to research/practice/theory in your field?
- Q What is already known or understood about this topic?
- Q How might your research add to this understanding, or challenge existing theories and beliefs?

These are questions that you will already probably be asking yourself. You will also need to be ready to answer them in a viva if you will be having one.

#### A critical review

It is important that your literature review is more than just a list of references with a short description of each one. The Study Guides: What is critical reading? and What is critical writing? are particularly relevant to the process of critical review.

Merriam (1988:6) describes the literature review as:

'an interpretation and synthesis of published work'.

This very short statement contains some key concepts, which are examined in the table below.

	Explanation	Associated critique
Published work	Merriam's statement was made in 1988, since which time there has been further extension of the concept of being 'published' within the academic context. The term now encompasses a wide range of web-based sources, in addition to the more traditional books and print journals.	Increased ease of access to a wider range of <b>published</b> material has also increased the need for careful and clear critique of sources. Just because something is 'published' does not mean its quality is assured. You need to demonstrate to your reader that you are examining your sources with a critical approach, and not just believing them automatically.
Interpretation	You need to be actively involved in interpreting the literature that you are reviewing, and in explaining that interpretation to the reader, rather than just listing what others have written.	Your interpretation of each piece of evidence is just that: an <b>interpretation</b> . Your interpretation may be self-evident to you, but it may not be to everyone else. You need to critique your own interpretation of material, and to present your rationale, so that your reader can follow your thinking.
Synthesis	The term 'synthesis' refers to the bringing together of material from different sources, and the creation of an integrated whole. In this case the 'whole' will be your structured review of relevant work, and your coherent argument for the study that you are doing.	Creating a <b>synthesis</b> is, in effect, like building interpretation upon interpretation. It is essential to check that you have constructed your synthesis well, and with sufficient supporting evidence.

### When to review the literature

With small-scale writing projects, the literature review is likely to be done just once; probably before the writing begins. With longer projects such as a dissertation for a Masters degree, and certainly with a PhD, the literature review process will be more extended.

There are three stages at which a review of the literature is needed:

- an early review is needed to establish the context and rationale for your study and to confirm your choice of research focus/question;
- as the study period gets longer, you need to make sure that you keep in touch with current, relevant research in your field, which is published *during* the period of your research;
- as you prepare your final report or thesis, you need to relate your findings to the findings of others, and to identify their implications for theory, practice, and research. This can involve further review with perhaps a slightly different focus from that of your initial review.

This applies especially to people doing PhDs on a part-time basis, where their research might extend over six or more years. You need to be able to demonstrate that you are aware of current issues and research, and to show how your research is relevant within a changing context.

## Who can help?

**Staff and students** in your area can be good sources of ideas about where to look for relevant literature. They may already have copies of articles that you can work with.

If you attend a **conference or workshop** with a wider group of people, perhaps from other universities, you can take the opportunity to ask other attendees for recommendations of articles or books relevant to your area of research.

Each department or school has assigned to it a specialist **Information Librarian**. You can find the contact details for the Information Librarian for your own area via the Library web pages. This person can help you identify relevant sources, create effective electronic searches to find information, provide training in information skills and the use of databases, and can help you to develop your research skills.

http://www.le.ac.uk/library/about/informationlibrarians.html

## **Getting started**

Reading *anything* on your research area is a good start. You can then begin your process of evaluating the quality and relevance of what you read, and this can guide you to more focussed further reading.

Taylor and Procter of The University of Toronto have some useful suggested questions to ask yourself at the beginning of your reading:

- What is the specific thesis, problem, or research question that my literature review helps to define?
- What type of literature review am I conducting? Am I looking at issues of theory? methodology? policy? quantitative research? qualitative research?
- What is the scope of my literature review? What types of publications am I using (e.g., journals, books, government documents, popular media)?
- What discipline(s) am I working in (e.g., nursing, psychology, sociology, medicine)?

http://www.writing.utoronto.ca/advice/specific-types-of-writing/literature-review

You can add other questions of your own to focus the search, for example: What time period am I interested in? What geographical area? What social setting? What materials?

You may also want to make a clear decision about whether to start with a very narrow focus and work outwards, or to start wide before focussing in. You may even want to do both at once. It is a good idea to decide your strategy on this, rather than drifting into one or the other. It can give you a degree of control, in what can feel like an overwhelming and uncontrollable stage of the research process.

## Ways of finding relevant material

#### Electronic sources

Searching electronic databases is probably the quickest way to access a lot of material. Guidance will be available via your own department or school and via the relevant Information Librarian.

There may also be key sources of publications for your subject that are accessible electronically, such as collections of policy documents, standards, archive material, videos, and audio-recordings.

#### References of references

If you can find a few really useful sources, it can be a good idea to check through their reference lists to see the range of sources that *they* referred to. This can be particularly useful if you find a review article that evaluates other literature in the field. This will then provide you with a long reference list, and some evaluation of the references it contains.

#### Hand searching of journals

No electronic literature search can be 100% comprehensive, as the match between search terms and the content of articles will never be perfect. An electronic search may throw up a huge number of hits, but there are still likely to be other relevant articles that it has not detected. So, despite having access to electronic databases and to electronic searching techniques, it can be surprisingly useful to have a pile of journals actually on your desk, and to look through the contents pages, and the individual articles.

Often hand searching of journals will reveal ideas about focus, research questions, methods, techniques, or interpretations that had not occurred to you. Sometimes even a key idea can be discovered in this way. It is therefore probably worth allocating some time to sitting in the library, with issues from the last year or two of the most relevant journals for your research topic, and reviewing them for anything of relevance.

Blaxter et al. (2001:103) recommend this method, in addition to other more systematic methods, saying:

'Take some time to browse - serendipity is a wonderful thing.'

## **Collecting material**

To avoid printing out or photocopying a lot of material that you will not ultimately read, you can use the abstracts of articles to check their relevance before you obtain full copies.

EndNote and RefWorks are software packages that you can use to collect and store details of your references, and your comments on them. As you review the references, remember to be a critical reader (see Study Guide *What is critical reading?*).

## **Keeping a record**

Keeping a record of your search strategy is useful, to prevent you duplicating effort by doing the same search twice, or missing out a significant and relevant sector of literature because you think you have already done that search. Increasingly, examiners at post-graduate level are looking for the detail of how you chose which evidence you decided to refer to. They will want to know how you went about looking for relevant material, and your process of selection and omission.

You need to check what is required within your own discipline. If you are required to record and present your search strategy, you may be able to include the technical details of the search strategy as an appendix to your thesis.

## **Plagiarism**

Plagiarism is regarded as a serious offence by all Universities, and you need to make sure that you do not, even accidentally, commit plagiarism.

Plagiarism is the using of someone else's words or ideas, and passing them off as your own. It can happen accidentally, for example, if you are careless in your note-taking. This can mean that you get mixed up over what is an exact quote, and what you have written in your own words; or over what was an idea of your own that you jotted down, or an idea from some text.

A practical way to help you avoid accidentally forgetting to reference someone else's work, is routinely to record short extracts of text *verbatim* i.e.: using the exact words of the author, rather than putting the idea into your own words at the point where you are still reading. You will need to put inverted commas ('xxxx') around the exact quote, and record the page number on which it appears.

This has the advantage that, when you come to use that example in your writing up, you can choose:

- to use the exact quote in inverted commas, with the reference and page number; or
- to describe it in your own words, and use the standard reference format, without the page number, to acknowledge that it was someone else's idea.

Help is available regarding how to avoid plagiarism and it is worth checking it out. Your department will have its own guidance. Further help is available from Learning Development's Study Guide on the topic. Learning Development has also created a series of online tutorials on avoiding plagiarism, each one tailored to relate to a different academic area.

## When to stop

It is important to keep control of the reading process, and to keep your research focus in mind. Rudestam and Newton (1992:49) remind us that the aim is to 'Build an argument, not a library'.

It is also important to see the writing stage as part of the research process, not something that happens after you have finished reading the literature. Wellington et al (2005:80) suggest 'Writing while you collect and collecting while you write.'

Once you are part way through your reading you can have a go at writing the literature review, in anticipation of revising it later on. It is often not until you start explaining something in writing that you find where your argument is weak, and you need to collect more evidence.

A skill that helps in curtailing the reading is: knowing where to set boundaries. For example, a study of the performance of a clinical team working in gerontology might involve reading literature within medicine; nursing; other allied healthcare specialties; psychology; and sociology; as well as perhaps healthcare policy; and patients' experiences of healthcare. Decisions need to be made about where to focus your reading, and where you can refer briefly to an area but explain why you will not be going into it in more detail.

#### Writing it up

The task of shaping a logical and effective report of a literature review is undeniably challenging. Some useful guidance on how to approach the writing up is given by Wellington et al (2005:87):

- "It should be framed by your research questions.
- It must relate to your study.
- It must be clear to the reader where it is going: keep signposting along the way.
- Wherever possible, use original source material rather than summaries or reviews by others.
- Be in control, not totally deferent to or 'tossed about by' previous literature.
- Be selective. Ask 'why am I including this?'
- It is probably best to treat it as a research project in its own right.
- Engage in a dialogue with the literature, you are not just providing a summary."

In most disciplines, the aim is for the reader to reach the end of the literature review with a clear appreciation of what you are doing; why you are doing it; and how it fits in with other research in your field. Often, the literature review will end with a statement of the research question(s).

Having a lot of literature to report on can feel overwhelming. It is important to keep the focus on your study, rather than on the literature (Wellington 2005). To help you do this, you will need to establish a structure to work to. A good, well-explained structure is also a huge help to the reader.

#### **Structure**

As with any piece of extended writing, structure is crucial. There may be specific guidance on structure within your department, or you may need to devise your own.

Examples of ways you might structure your literature review are:

- chronologically; although be careful not just to list items; you need to write critically, not just descriptively;
- by theme; this is useful if there are several strands within your topic that can logically be considered separately before being brought together;
- by sector e.g.: political background, practice background, methodological background, geographical background,
   literary background;
- by development of ideas; this could be useful if there are identifiable stages of idea development that can be looked at in turn;
- by some combination of the above, or by another structure you create.

There are many possible structures, and you need to establish one that will best fit the 'story' you are telling of the reason for your study. Once you have established your structure you need to outline it for your reader.

#### A narrative thread

Although you clearly need to write in an academic style, it can be helpful to imagine that you are telling a story. The thread running through the story is the explanation of why you decided to do the study that you are doing. The story needs to be logical, informative, persuasive, comprehensive and, ideally, interesting. It needs to reach the logical conclusion that your research is a good idea.

If there is a key article or book that is of major importance to the development of your own research ideas, it is important to give extra space to describing and critiquing that piece of literature in more depth. Similarly, if there are some studies that you will be referring to more than to others, it would be useful to give them a full report and critique at this stage.

## **Using tables**

As well as using tables to display numerical data, tables can be useful within a literature review when you are comparing other kinds of material. For example, you could use a table to display the key differences between two or more:

- possible theoretical perspectives;
- possible methods;
- sets of assumptions;
- sample profiles;

possible explanations.

The table format can make the comparisons easier to understand than if they were listed within the text. It can also be a check for yourself that you have identified enough relevant differences. An omission will be more obvious within a table, where it would appear as a blank cell, than it would be within text.

#### Reference list

Almost all academic writing will need a reference list. This is a comprehensive list of the full references of sources that you have referred to in your writing. The reader needs to be able to follow up any source you have referred to.

The term 'bibliography' can cause confusion, as some people use it interchangeably with the term 'reference list'; but they are two different things. The term 'bibliography' refers to any source list that you want to place at the end of your writing, including sources you have not referenced, and sources you think readers may want to follow up. A bibliography is not usually necessary or relevant, unless you have been asked to produce one.

#### **Common concerns**

Help! I've spent ages reading up on Method 'A', and now I've decided to use Method 'N'. I feel I've wasted all that time!

This experience is common in PhD study, but it can happen at any level, and can feel as if you have wasted a lot of effort. Looking at this positively, however, you have probably read more widely than you might otherwise have done. Also, it may still be possible to include some of this learning in your write-up, when you explain why you decided *not* to use Method 'A'. It is also possible that, in a viva, you will be asked why you didn't use that method, and you will be well-prepared to answer in detail.

Help! I thought I had a really good idea for my research, and now I've found that someone else has already asked the same research question!

That probably confirms that it was a good question to ask! Although this can feel very disappointing at first, it can often be transformed into a benefit. It is important that your research fits logically within the existing research in your area, and you may have found an ideal study to link with and to extend in some way. Remember that:

- if it (or something very like it) has been done before, and has been published, it is likely that this signifies it was a relevant and important topic to investigate;
- you can learn from how the previous researchers did it: what worked and what didn't;
- did the previous researchers suggest any further research? If so, you may be able to link your own plans to fit with their suggestions;
- can you take the investigation further by doing your own similar research: in a different setting; with a different sample; over a different timescale; with a different intervention etc.;
- their literature review and reference list should be useful.

Help! I think I've got a great idea for a study, but I can't find anything published about the topic.

Firstly, this is unlikely. Perhaps if you modify your search strategy you will find something. However, if there really isn't anything, then you need to ask why this is the case. Check out whether there is an important reason why the research has not been done, which would make it sensible for you to choose a different focus. If you do decide to go ahead, then take extra care designing your research, in the absence of guidance from previous studies.

Blaxter et al. (2001:125) suggest that, if there appears to be no research in your field:

'...you should probably consider changing your topic. Ploughing a little-known furrow as a novice researcher is going to be very difficult, and you may find it difficult to get much support or help.'

An important aspect of your thesis and your viva, is that you can show how your research fits with other research. This will be just as important when there is limited existing research in your area, as when there is an abundance.

## **Reviewing your review**

Once you have a first draft of your literature review it is possible for you to assess how well you have achieved your aims. One way of doing this is to examine each paragraph in turn, and to write in the margin a very brief summary of the content, and the type of content e.g.: argument for; argument against; description; example; theory; link. These summaries then provide the outline of the story you are telling, and the way that you are telling it. Both of these are important and need to be critically reviewed.

Useful questions at this stage include:

- What is the balance between description and comment?
- Have I missed out any important dimension of the argument, or literature?
- Have I supported the development of each step in my argument effectively?
- Is the material presented in the most effective order?
- Are there places where the reader is left with unanswered guestions?
- Is every element of my research question supported by the preceding material?
- Have I explained to the reader the relevance of each piece of evidence?
- Is there any material that is interesting but which does not contribute to the development of the argument?
- Have I explained adequately the justification for this research approach / topic / question?
- Are my references up to date?
- How effective is my linking of all the elements?

Beware of becoming too attached to your writing. You need to be ready to cross out whole paragraphs or even whole sections if they do not pass the above tests. If you find that what you've written is not in the best order, then re-shaping it is not a huge problem. It may be mainly a case of cutting and pasting material into a different order, with some additional explanation and linking. If this produces a more relevant and streamlined argument it is well worth the effort.

#### References

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