LITERATURE REVIEWS

A literature review is an important part of any research project, as it sets your research in context and identifies how it fits with the research that has been done before. You may be asked to write a literature review as part of a dissertation, thesis, or longer project, or as a separate assignment to develop the research, synthesis and analytical skills involved.

A key feature of any literature review is how you choose to group the literature into sub-sections or themes to enable comparison. This shows how you are conceptualising the topic. The structure you create helps you (and your readers) navigate and understand the literature. In a longer project, it is normal to refer back to the concepts in the literature review to help analyse your own results and provide potential reasons to explain what you have found. So it is important to set up these concepts clearly, and to explore and evaluate them in the literature review.

A literature review is a process (involving sourcing, reading, organising, and analysing the literature) and also a product (involving communicating your understanding and your interpretation of that literature). The advice in this guide will help you navigate both the research process and the production of the final literature review.

Starting your literature review

Before getting started on sourcing and reviewing the background literature for a research project, it is important to understand the role that a literature review plays in the research process, and how it can be helpful later on for placing your own findings in context. Knowing the job that a literature review does means you can be more targeted and systematic in your literature searching. The guidance on this page will explain what you need to know about the purpose of a literature review and how to begin scoping your search.

Why write a literature review?

New discoveries don't materialise out of nowhere; they build upon the findings of previous experiments and investigations. A literature review shows how the investigation you are conducting fits with what has gone before and puts it into context.

A literature review demonstrates to your reader that you are able to:

* Understand and critically analyse the background research
* Select and source the information that is necessary to develop a context for your research

It also:

* Shows how your investigation relates to previous research
* Reveals the contribution that your investigation makes to this field (fills a gap, or builds on existing research, for instance)
* Provides evidence that may help explain your findings later

If you are doing a thesis, dissertation, or a long report it is likely that you will need to include a literature review. If you are doing a lab write-up or a shorter report, some background reading may be required to give context to your work, but this is usually included as an analysis in the introduction and discussion sections.

What is a literature review?

A literature review is a select analysis of existing research which is relevant to your topic, showing how it relates to your investigation. It explains and justifies how your investigation may help answer
A literature review is not a straightforward summary of everything you have read on the topic and it is not a chronological description of what was discovered in your field.

A longer literature review may have headings to help group the relevant research into themes or topics. This gives a focus to your analysis, as you can group similar studies together and compare and contrast their approaches, any weaknesses or strengths in their methods, and their findings.

One common way to approach a literature review is to start out broad and then become more specific. Think of it as an inverted triangle:

* First briefly explain the broad issues related to your investigation; you don't need to write much about this, just demonstrate that you are aware of the breadth of your subject.

* Then narrow your focus to deal with the studies that overlap with your research.

* Finally, hone in on any research which is directly related to your specific investigation. Proportionally you spend most time discussing those studies which have most direct relevance to your research.

**How do I get started?**

Start by identifying what you will need to know to inform your research:

* What research has already been done on this topic?

* What sub-areas might you need to explore?

* What other research (perhaps not directly on the topic) might be relevant to your investigation?

* How do these sub-topics and other research overlap with your investigation?

Note down all your initial thoughts on the topic. You can use a spidergram or list to help you identify the areas you want to investigate further. It is important to do this before you start reading so that you don't waste time on unfocussed and irrelevant reading.

**Searching for sources**

It's easy to think that the best way to search for texts is to use the Internet - to 'Google it'. There are useful online tools that you may use, like Google Scholar. However, for most literature reviews you will need to focus on academically authoritative texts like academic books, journals, research reports, government publications.

Searching Google will give you thousands of hits, few of them authoritative, and you will waste time sorting through them.

A better idea is to use databases. These are available through the Library in paper and electronic (usually online) forms.

**Tip:** See the Library's guides to searching databases. The suggestions here will help you to improve your search techniques for books, journal articles and other texts, not just on databases, but also in the Library catalogue and in online searches. There is also a video on Doing your literature search.

Use journal articles: They normally have the most up-to-date research and you will be expected to refer to them in your literature review. The Library has a guide on finding journal articles.

The Library also has a liaison librarian for each subject and guides to finding information in your subject.

You may find review articles that survey developments in your field. These are very useful for identifying relevant sources - but do go back to the original texts and develop your own critical analysis if possible.

Another good way to find sources is to look at the reference lists in articles or books already identified as relevant to your topic. You will be expected to prioritise recent research, but it's also important to acknowledge the standard texts in your field. An easy way to identify these is to check reference lists to see which texts are frequently cited.

**Postgraduates:**

Unlike undergraduates, you will be expected to pay more attention to the most up-to-date research. This may include theses, conference papers and 'grey literature'. The Library has
Useful tips for keeping up-to-date in your area of research.

**Undertaking your literature review**

When reading and analysing a lot of sources, it is important to have a good system for taking notes and keeping track of what you read. This will make it easier to find what you need later, especially in a larger project or dissertation conducted over a longer period of time. A systematic process will also make it easier to start grouping the literature into themes or key concepts, and help you start to see where authors reach consensus or disagree with each other. The advice on this page gives valuable tips on how to structure your reading and start to turn your notes into a coherently planned literature review.

**Structuring your reading**

If you have thought about the areas you need to research and have conducted some searches for literature, you should be ready to set down some draft topic headings to structure your literature review.

Select one of your headings and choose a few key texts to read first - three is ideal to start with. Remember that you may eventually be writing about the same text under different headings, so bear that in mind when you are reading and making notes.

**Tip:** Get into good habits with note-making now to save yourself a lot of trouble later - always write the details of the text at the top of your page of notes, and add page numbers against your notes as you write them, so you can find your place again if necessary.

When you have finished reading your chosen texts, write a draft section summarising and commenting on what you have read, taking special care to show how it is relevant to your research. Then look to see what you need to discuss further, and do more reading to enable you to plug the gaps.

**When to stop reading?**

You should be guided by how long your literature review needs to be - it is no good reading hundreds of texts if you only have 1,000 words to fill.

**Tip:** Work out what your target word count will be for each section and aim to write to it. This will help you to avoid over-reading or writing on any one topic.

Try to set limits on how long you will spend reading. Then plan backwards from your deadline and decide when you need to move on to other parts of your investigation e.g. gathering the data.

You need to show you have read the major and important texts in your topic, and that you have also explored the most up-to-date research. If you have demonstrated both of these, you are on the right lines.

**Tip:** An easy way to identify the major standard texts in your field is to check reference lists and citation indexes to see which texts are frequently cited.

If you keep coming across very similar viewpoints and your reading is no longer providing new information, this is a sign you have reached saturation point and should probably stop.

Be guided by your research questions. When reading, ask yourself, "How does this relate to my investigation?" If you are going off into unrelated areas, stop reading and refocus on your topic.

**Postgraduates:**

If you are doing a PhD or large research project that spans over a number of years, you will have to make a conscious decision to change focus from background reading to gathering data. The first job your literature review has to do is to inform your research design and objectives: once you have enough information to do that with confidence, it may be time to switch to data gathering. It is normal to do a draft of the literature review then put it to one side to return to later in your project. You will still need to keep up-to-date in your field, so it may help to schedule some time each week for reading.
How to organise a literature review

Spidergrams are a good way of getting an overview of what you have read and showing connections between ideas. You may like to start by doing a spidergram for the whole topic of your investigation and then break it down into smaller spidergrams for the different areas you have read about.

Another thing you can do is to group what you have read into different topics or themes. These can provide useful headings when you come to write up your literature review. Use different coloured highlighters to identify which topic or heading each article fits into.

Be selective - you don't have to include everything you have read in your literature review. Only include research which is relevant and which helps you understand more about your own investigation. What you leave out won't be wasted as it helped you refine your understanding of the wider issues and identify what was relevant to your own investigation.

You don't have to refer to everything in the same depth in your literature review. You are usually expected to prioritise recent research. Some scientific research that was crucial in the past is now out of date. For instance, there may be a few older studies that were important in starting research in the field, but their methods have been surpassed by more accurate methods. You only need to demonstrate your awareness of these older, dated studies in a few sentences, then move on to discussing in greater depth the up-to-date methods and why they are more accurate.

Tip: Develop a simple and easy-to-use filing system to keep your reading and notes organised. This could be a box file for all your literature review material. If you are doing a thesis or longer project you may expand this into a box file per topic or section. Also keep your bibliography up to date as you go along to save pain later. Postgraduates may want to use reference-managing software like Endnote, Mendeley or RefMan to compile their bibliography.

Writing your literature review

Like an essay, a literature review has an introduction, main body, and conclusion.

Introduction: This explains the broad context of your research area and the main topics you are investigating. It briefly highlights the relevant issues or debates that have characterised your field of research.

It should also include some signposting for the reader, explaining the organisation / sequence of topics covered, and the scope of your survey.

For example: "There have been many studies on the effectiveness of advertising on various audiences. However, since the focus of this research is on the effects of TV advertising on children, these studies will not be reviewed in depth, and only referred to when appropriate."

(Adapted from the Royal Literary Fund: The structure of a literature review, at https://www.rlf.org.uk/resources/the-structure-of-a-literature-review/)

Main body: An analysis of the literature according to a number of themes or topics that overlap with your research. It may have headings.

You can write your literature review one section at a time, but make sure you read through them all to check they link together and tell a coherent "story".

This should show how your research builds on what has been done before. Based on previous research, you provide justifications for what you are doing, why you are doing it, and how you are going to do it.

Conclusion: This should summarise the current state of the research in your field as analysed in the main body. It should identify any gaps or problems with the existing research, and explain how your investigation is going to address these gaps or build on the existing research.

Developing your literature review

An important part of a literature review is being able to pull together and group what you have read in order to identify the key arguments in the previous research. This is a good foundation, but then you need to go further and analyse what
others have researched. You need to offer judgements on whether the evidence shows their arguments to be convincing or less convincing and why. This analytical groundwork means you will be able to refer back to this literature economically to provide potential reasons for your own research findings: Do your results agree with, or disagree with, what others have found, and why might this be? The guidance on this page offers suggestions for developing your literature review to ensure you are critically analysing what you have read.

Analysing the literature critically

Critical analysis means asking yourself whether you agree with a viewpoint and if so, why? What is it that makes you agree or disagree?

You can ensure you are analysing critically by testing out your own views against those you are reading about: What do you think about the topic? Then as you read each new study, does the evidence presented confirm your view, or does it provide a counter-argument that causes you to question your view?

Also think about the methods used to gather the evidence - are they reliable or do they have gaps or weaknesses?

Postgraduates:

Talk about what you have read with your supervisor. This is a good way of testing out your views, and getting feedback on the quality of your analysis and the relevance of what you have been reading. Be prepared to defend your views - this is good practice if you will be having a viva or giving conference papers.

When writing up your literature review use each of your headings or themes to compare and contrast the differing views put forward in the relevant studies and explain how they relate to your investigation.

Your literature review needs to tell an interesting "story" which leads up to how and why you are doing your investigation. If you are writing a story which reads like one thing after another, this is likely to be descriptive. However, if your story is comparing, contrasting and evaluating the previous literature, you are on the right track. See the example below:

Descriptive

Summarises what other people have found without saying what these findings mean for your investigation.

Usually a chronological list of who discovered what, and when.

For example:

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

Analytical

Synthesises the work and succinctly passes judgement on the relative merits 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.

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 ….."

Referring back from your discussion

Your literature review has two main purposes:

1) To place your investigation in the context of previous research and justify how you have approached your investigation.

2) To provide evidence to help explain the findings of your investigation.

It is this second purpose that many people forget!

When you are writing the discussion of your findings, you need to relate these back to the background literature. Do your results confirm what was found before, or challenge it? Why might this be? For example:
Finding: 95% of the students you surveyed have problems managing their time at university.

What do you think about this?: I expected it to be less than that.

What makes you think that?: Research I read for my literature survey was putting the figure at 60-70%.

What conclusions can you draw from this?: There must be reasons why the figures are so different. The sample I surveyed included a large number of mature students, unlike the samples in the previous research. That was because the brief was to look at time management in a particular department which had a high intake of post-experience students.

Finished paragraph for Discussion section

The percentage of students surveyed who experienced problems with time management was much higher at 95% than the 60% reported in Jones (2006) or the 70% reported in Smith (2007a). This may be due to the large number of mature students recruited to this post-experience course. Taylor (2004) has described the additional time commitments reported by students with young families, and the impact these may have on effective management of study time. The department recognises this, offering flexible seminar times. However it may be that students would benefit from more advice in this area.

When writing your discussion section, you may find that you need to redraft the focus of your literature review slightly to draw out those studies that are most important to your findings. You can always remove studies that are less relevant and add others that turned out to be more significant than you initially thought.

Postgraduates:

When doing a PhD or long research project, you will find your literature review is more like a work in progress than a finished chapter. You may write an initial draft, put it to one side, then come back to it as the focus of your project shifts, or you discover new research. You may end up restructuring your literature review a number of times, and you will certainly need to do a thorough re-draft at the end before you submit.

Some academics explain the relationship between the literature review and the discussion section like an hour-glass: Your literature review starts broad, then narrows down to explain how previous research has influenced your specific investigation. The discussion starts by analysing your results, explaining what they mean for the outcome of your study, and ends by widening out to assess how these results might contribute to your field of research as a whole.

This guide reproduces the text of our LibGuide on Literature Reviews. The online guide has links to additional information and can be found at:
https://libguides.reading.ac.uk/literatuerreview

For tips and guidance on other academic skills, see the Study Advice website at
www.reading.ac.uk/library/study-advice