Thesis writing

Literature reviews

PURPOSE

A literature review in a thesis is a critical review of literature relevant to a particular study. It’s not a summary of the whole field, or a haphazard regurgitation of everything you’ve read, but an organised and critical discussion that lets your reader see how you’ve selected and interpreted literature most relevant to your research question. It functions to contextualise your study within a research field by identifying where there are gaps in existing knowledge that your own research will help to fill. See the examples from various disciplines to see how a literature review can be organised to provide a critical review of the field and relate the literature to the thesis, showing how previous research informs and motivates the new research being presented.

The challenge in producing a literature review is to critically discuss the literature in an organised way that also justifies doing further research. It’s helpful, during the process of reviewing the literature, to continually categorise the research literature you’re reading. Your notes on articles you read could, for example, be organised to show how a field has developed over time, or to compare key concepts, methods, theories or philosophies represented in various publications. To help clarify how various previous studies in the field are similar and different, you could also develop a concept map that represents the key ideas emerging from your reading and analysis of others’ research. This map can then be used to help you organise your writing into a clear, critical argument.

Before you begin writing, you could use the following questions to guide your decisions about which literature to include in your review, so that your discussion of the field is tightly focussed:

- What research questions should my literature review help to define?
- What type of lit review am I conducting? Am I exploring theoretical, methodological or policy issues?
- Is my own research qualitative or quantitative?
- What is the scope of my review? Which literature is most and least relevant to my review of others’ research?
- Do I understand the controversies in the field, and the methodological/theoretical flaws in previous research?
- Which specific gaps in knowledge could my research fill?

Your evaluation of the literature should be clearly visible in your writing. You can make your views known in the way you organise your discussion, based on the analysis you’ve done while reading, noting conceptual, methodological, theoretical or philosophical similarities and differences across the literature. Your analysis should be reflected in the way you begin paragraphs: notice this organisational signposting in the example literature review from Biology, where previous research is grouped according to the various methodologies of the studies being discussed.

There are many ways you can organise a discussion of the literature on your topic, the most important thing for your review is that you have a clear focus and reasons for that focus. If you choose to focus on key concepts in others’ research, or on the influence of the researchers themselves, make sure you know why you have chosen to focus on one or the other. Pay attention to these differences in the examples.

Literature reviews in a thesis are not simply summaries of previous research – they should be critical discussions of published research that function to contextualise a new piece of research. The following example of a not very good attempt at reviewing the literature illustrates several common mistakes: it summarises research in the field without evaluating it; it organises the presentation chronologically and focuses on ‘who’ did the research (rather than ‘what’ they found), apparently only because that is the easiest approach; and it doesn’t indicate how others’ research relates to the writer’s:
Example: a weak literature review

In the past, much has been discovered in the field of coastal erosion and the beach profiles that result from such erosion. Numerous laboratory experiments and field observations have been conducted to identify the mechanics and impact of coastal erosion. This research is reviewed below.

JACHOWSKI (1964) developed a model investigation conducted on the use of interlocking precast concrete block in seawalls. After a survey of damage caused by severe storms on the coast of the USA, a new and specially shaped concrete block was developed for use in shore protection. This block was designed for use in a revetment type seawall that would reduce wave run-up and overtopping, and scour at the base or toe of the wall and be both durable and economical. It proved that effective shore protection could be achieved utilizing these units.

SELEZOV and ZHELEZNYAK (1965) conducted experiments on the scouring of sea bottom in front of harbour seawalls, via a theoretical investigation of solitary wave interaction with a vertical wall using a Boussinesque type equation. It showed that the numerical results were in reasonable agreement with laboratory experimental data.

To see more successful examples that do evaluate, foreground what has been learned, and provide a sound rationale for further research, see the discipline examples. The Biology example focuses on the methodology of previous studies rather than authors, and this focus on methodological problems provides a rationale for the new study.

Where a literature reviews is positioned within a thesis depends on the discipline and the type of study being reported. They can form part of the general introductory chapter, or be a separate chapter, and they can be embedded into various body chapters that deal with separate sub-topics. Your choice in where to position your literature review, and how to name it, should be guided by what’s common and expected in theses within your discipline, and the nature of your research project. Whatever it’s called and wherever it’s positioned within a thesis, the literature review plays a critical role in a thesis, as it both contextualises and justifies the research.