Chapter 5: Doing a literature review
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Abstract (not for inclusion)
The first stage of most research projects is to undertake a review of the literature to determine what research has already been conducted in this area. This review helps the researcher to hone their own research questions and to determine how they plan to conduct their research. The purpose of the literature review section of the final report of the research project is to summarise this previous literature and to provide a clear rationale for the current research in the light of what has been done before. This section is often called the 'introduction' in a research paper as it introduces the reader to the area, funnelling down from the broad topic under consideration and why it is important, through a critical consideration of prior research which identifies any gaps in the literature, to the specific research questions or hypotheses of the current study.

This chapter covers both the process of searching for relevant literature and the process of writing the literature review chapter, or introduction. It should be read in conjunction with the previous two chapters because the process of literature review runs parallel with the choice of research question, and obviously skills in reading and understanding research are necessary for conducting and writing up a literature review.

Introduction
The first stage of most research projects is to undertake a review of the literature to determine what research has already been conducted in the area. This helps the researcher to hone their own research questions and to determine how they plan to conduct their research. The purpose of the literature review section of the final report of the research project is to summarise this previous literature and to provide a clear rationale for the current research in the light of what has been done before. This section is often called the 'introduction' in a research paper as it introduces the reader to the area, funnelling down from the broad topic under consideration and why it is important, through a critical consideration of prior research which identifies any gaps in the literature, to the specific research questions or hypotheses of the current study.

This chapter covers both the process of searching for relevant literature and the process of writing the literature review. It should be read in conjunction with the previous two chapters because the process of literature review runs parallel with the choice of research question, and obviously skills in reading and understanding research are necessary.

The purpose of the literature review is to:
- Outline the area you are researching.
- Explain why it matters (e.g. Does it have implications for policy or treatment? Is this a particularly under-researched group?)
- Summarise the research that has already been done in this area, particularly any key studies.
- Identify any gaps in this literature: to justify why your study is important and what it adds to the literature.
- Present your research questions (if qualitative research) or hypotheses (if quantitative research). These should be set out at the end of the literature review.

This list will be useful whilst you are writing the literature review, as well as afterwards, to ensure that it does all these things.
It is likely that you will write one version of the literature review prior to conducting your research, but return to it afterwards to redraft it in order to ensure that it does tell a clear argument leading up to your research (rather than simply summarising past research) and that it includes all of the key studies and theories. Note that the literature review for a research proposal does not need to be as extensive as that for a final research write-up (see chapter 9).

As a general rule of thumb all of the research and theories mentioned in the rest of the paper should have been introduced in the literature review or introduction. However, it may be necessary to bring new material into the discussion and conclusions if the analysis suggests taking a different direction or engaging with a different area of research that you hadn't anticipated.

Conducting a literature search
Of course before you write your literature review you have to actually search through what has been done before. This stage is an integral part of the research process: it is through reviewing previous research that we can hone our own research questions (see chapter 3), avoid unethical practices such as over-researching certain groups, and take account of what past researchers have learnt about the best ways of approaching the topic.

Pause for reflection 1:
Think about a topic you are interested in researching (perhaps one that you considered in previous chapters or are thinking about for a dissertation, thesis or paper). How would you currently imagine going about finding out what research has been conducted before on this topic?

As a very rough rule of thumb, to keep the process manageable, what you are looking for by the end of the literature search are around five to fifteen key papers, chapters or books which are the main ones you will base your literature review around, and around twenty to forty additional materials (papers, books, reports, etc.) which you are likely to reference but are less central to your argument. These may be background reading or less specifically relevant papers which you will skim read and refer to rather than summarising in depth. Of course, such numbers depend somewhat on the level of study that you are at, and the length of the final report that you are working towards. You might need less for a brief research study on a foundation degree or diploma, and a good deal more (perhaps five times as much) for a full doctoral thesis of 80,000 words or so. However, the general process of searching for literature is similar whatever stage you are at.

This rule of thumb does not, of course, mean that you should conduct a literature search in a linear way, simply stopping once you have around forty papers, books, reports and chapters. Rather the literature search is a process of finding everything that you can of relevance and then whittling this down to the most essential work that you need to mention in your literature review. In fact the hardest task in the process is often deciding what to leave out.

There is rather a dark art to the process of searching for literature as you will find when you start to conduct literature searches yourself by typing words into search engines and databases. It isn't a simple matter that you type in the topics that you are interested in (for example 'bereavement and counselling' or 'eye movement desensitization and reprocessing for victims of the London bombings') and inevitably get back around ten key papers or books, and an additional thirty or so quite relevant ones. Rather you generally either get way too much (thousands and thousands of hits for your search terms) or way too little (one or two papers which might not be relevant at all to
what you are doing). This is where breadth and focus come in. If you realise that there is already loads written on your topic then you need to focus in ('bereavement of a child and person-centred therapy' for example). If there is hardly anything you need to broaden out (for example, to 'trauma counselling and therapy for victims of terrorist attacks').

As you search you will want to see how many hits you get, in order to narrow or broaden your search terms. It is also vital, at this point, to make sure you include all of the materials that anybody else in the area (such as your markers, examiners or reviewers) would regard as crucial. For example, some topics are covered in more than one discipline so you may have to look beyond papers and books on counselling and therapy. For example, bereavement is also addressed in health and social care, psychology and sociology. A useful suggestion that a piece of work is of central importance is when you spot it being referenced by several other writers in the area.

The literature review needs to cover each element of your research and any overlaps between them. For example, the diagram below illustrates the elements and their overlap for person-centred therapy with child bereavement. Your search would need to include bereavement, person-centred therapy, and children, as well as each of the overlaps (child bereavement, person-centred therapy and bereavement, etc.)

*Insert image here: Something like this*

There are three main stages of literature searching:

*First stage:* Using search engines and other resources to get together a large collection of relevant materials.

*Second stage:* Reading through the abstracts, summaries, etc. that you have obtained and using these to find further materials.

*Third stage:* Considering all the material you have to determine which papers and chapters you need to read in depth, and where the gaps in the literature lie.

We will now go through each of these in a little more detail.

*First stage*
There are various places to conduct your literature search, and it is usually worth using more than one of these as not every paper, book or article is listed in a single database, particularly if you need to search across more than one discipline.
Google Scholar is a great starting place which everybody can use regardless of which databases their college or university subscribes to. Type 'Google Scholar' into the Google search engine and then just use this in the same way as the regular Google. Google Scholar only links to academic papers, books and reports, avoiding the large amounts of non-academic materials you would get on the general search engine.

Increasingly papers, and to a less extent chapters and books, are freely available online. However, quite often you will only be able to access an abstract or a few pages without payment. Used in conjunction with your university or college library, however, you should be able to access many of the full documents. Talk with your librarian about this.

The librarian can also point you towards databases that the university or college subscribes to such as Psychinfo, Web of Science, or Medline. It is worth being aware that there are spelling differences across countries. For example, it is 'counselling' in the UK, and 'counseling' in the US, so use both spellings. Also, the terms by which researchers name things may vary by country, or just not be familiar to you. For example, with bereavement you would need to look up synonyms such as 'grief', 'mourning', 'loss', and 'death'.

Sometimes there are specific journals which specifically publish papers in the area that you are interested in. In such cases it is useful to search their websites for anything of relevance. For example if you were interested in relationship therapy for people in same-sex relationships you might find specific relationship therapy journals (such as Sex and Relationship Therapy), and those on lesbian, gay and bisexual people (such as the Journal of Homosexuality, and Psychology & Sexuality) and search those. You'll get a feel for the key journals as you look through the search results.

Finally, it may be useful to visit a large library such as the British Library to search their documents, especially if there is a historical element to your research (for example, if you were studying the treatment of people with mental health problems over time and wanted to view old reports, books or policy documents). It is also useful to search online book stores because books don't always come up in journal searches.

**Information box 1**

Let's go through an example of the kind of search that you might do towards the beginning of a research project on mindfulness therapy. You can follow through this process on your own internet browser.

- I open up Google Scholar and type in the word 'mindfulness'.
- This yields 70,700 results. I need to narrow down my search!
- Down the side of the screen I can not check 'patents' and 'citations' (given these are unlikely to be central materials), and restrict my date to work within the last decade. That takes me down to 30,700 results. Sorting by relevance then enables me to see the most relevant materials on the first few pages.
- Scanning these I soon realise that mindfulness has been applied to many different problems. I can narrow down my search if I'm particularly interested in one of these: depression. Typing 'mindfulness and depression' gets down to 17,000 hits.
- I might further narrow down my search if I'm interested in a particular form of mindfulness, e.g. Mindfulness-Based Cognitive Therapy (MBCT). Searching for this gets me down to 8,040 results.
This might be a starting point for printing out and reading the first few pages worth of abstracts to get a feel for the field, and/or I might narrow it down still further. If you click the arrow box to the right of the search box you can fill in further search options, for example if I'm not interested in depression related to pain and illness I could include those in the 'without' box.

Second stage:
Once you have done your initial search you can obtain the full papers, books or reports for the most relevant looking materials by following the links or ordering them through your library. It is then worth looking through these to ensure that you have all the key references that other people are citing. I often come across a really important book or paper by looking at what is cited in other papers rather than through the search engine process.

At this point it may even be worth even emailing, key names in the field and ask them for any relevant papers or recommended reading. Many academics respond positively to a brief, interested email.

Ensure that you consider the quality of the materials that you have found at this point. Only clearly academic sources which have been properly peer-reviewed will count in your report so be very cautious of including general webpages, wikipedia pages, newspaper articles, blogs, and so on. The only real exceptions to this are when you are actually talking about the way that something is represented in the media or popular imagination, or when there is a 'grey literature' that you need to draw on (for example reports published by small charities or organisations on the experience of a specific group that has been under-researched). In these cases just ensure you are careful to flag up, in your writing, that you are aware that these are not academic sources and to make clear why you are using them.

Top tip:
During the second stage of literature searching it is well worth making a reference list as you go along: either a word document with all of the references in (alphabetised and/or in topic sections) or using a programme which helps you to insert references into your writing. (see chapter 9 for information on how to reference). It can also be useful to make summaries as you go along (see chapter 4).

Third stage:
During the third stage of the literature search you will have determined which materials you want to read in detail and begin doing so.

You will also now be getting a sense of the structure of the story you will tell in the literature review and where the areas are which have not yet been researched in depth.

You might well find it useful to cut up you abstracts and/or summaries of papers or chapters into separate pieces of paper, and then to sit on the floor and try to sort them into ‘like’ piles or related materials: this can give a good visual impression of the overall shape of the research in an area, and where there might be gaps for your own research. A similar thing can be done using computer files and folders if you work better that way.

Activity 1:
Choose a counselling/psychotherapy-related topic of interest to you (perhaps one you are planning to go on and research). Conduct a literature search using the search possibilities which are readily available to you (e.g. google scholar, Amazon, your university or college's online library search, and any existing books or papers you have).

Identify which the key materials you’d draw on would be, and what more general materials would be of help, if you were going to write a literature review on this topic.

*Comment*

Keep hold of the list of materials that you develop for this activity as it will be useful as the basis of later activities where you'll have a go at structuring a literature review.

*Insert image here: Cartoon of somebody drowning in a sea of papers*

Conducting a literature search can feel overwhelming because there is often so much written on a topic. Also each time you search you find new and potentially very useful material. At some point, of course, you just have to draw a line and determine to press ahead with what you have. This line will be an arbitrary one given that there is always more possible material, but it is important that you draw the line, rather than striving for completeness or perfection. Any marker, examiner or reviewer will be aware that nobody can read everything.

**Writing up the literature review**

Once you feel that you have sufficient materials and have become familiar with them, you are ready to embark on the process of writing. Often, however, it is not a matter of doing all your reading and then doing all your writing. Rather, you swing between the two, for example jotting down a structure for your literature review, then going back and re-reading the papers that are most relevant to the first section, then coming back to draft that section, checking back with your reading, and possibly even doing a further literature search, once you have a complete draft in case there is something you've missed, etc.

The literature review is likely to be pretty much the first thing that you write of your research write-up, therefore it is important to think a little about the writing process before you start. Embarking upon a major writing project is a nerve-wracking for most people, even those of us who are very experienced writers. In addition to this, lots of people find writing the literature review harder than other parts of a report because it requires understanding and synthesizing so much material whilst making a clear argument. You can help yourself a lot by planning how you are going to write before you begin.

*Pause for reflection 2:*

What are the main anxieties and blocks that you have about writing? What do you currently do to address these?

Writing can tap into areas of low confidence and self-esteem. Even the most experienced writer sometimes worries about being ‘found out’ as not knowing enough if they put their words on paper. There is a concern that what we write will be ‘set in stone’ for all time. Many people simply do not see themselves as a writer, perhaps because they were not the ‘academic one’ in the family, or their writing was criticised at school.

We can tackle such worries in many ways. First it is useful to aspire to be a 'good enough' writer,
rather than striving for perfection. You can't possibly please every potential reader of your work because different people like different things (in terms of tone, style and content) so define your audience and write for them (the most likely reader who is interested in the area and wants it clearly explained and to learn more). If you have time before you have to write a big project, you might find it useful to write smaller things (e.g. letters, blog posts, book reviews) to build up your confidence.

There are many things that you can do to make writing a long piece, like a literature review, a less daunting prospect. The worst thing to do is to stare at the blank screen trying to write the perfect first sentence. Instead, start with a mind map, followed by a structure for your writing (see below). Building up like this breaks the task down into sections of a few hundred words at most. It is amazing how fast it can go when you break it into chunks.

Think about when and where you write best and create that environment. Many people find it useful to do writing for an hour per day, stopping after that if it is not flowing and going on to other, less daunting, tasks (like reading, structuring papers, dealing with data, conducting further literature searches, etc.) When you do sit down to write make sure that you do write for an hour. Don't worry about the quality or wording for the first draft. Just get down what you want to say in the way you would explain it to a friend. You can go through and polish the language later.

It often helps to start with a mind-map of the information that you obtained from the literature research to help you to see what there is to include, before going into actual writing. The information boxes below gives you an example mind map for my literature review on mindfulness therapies and depression, and an invitation for you to create your own mindmap for the topic you explored in Activity 1.

Information box 2
Example mindmap on mindfulness therapies and depression that gives you an overview of the different areas of published research on this topic.

Once you have something like this you can go in and make a note of the specific references that you would want to include in each section (names and dates from your list). You could also use
different coloured ink to highlight different types of papers (theory/research, quantitative/qualitative, CBT-based/other, etc.)

Activity 2:
Create your own mindmap for the topic you're interested in.

As mentioned, the first part of writing the literature review is to rough out a structure. Moving from the mind map to the structure involves weaving the content that you want to draw on into a coherent story. Remember that the purpose of the literature review is to provide a rationale and justification for your research: why it is necessary and why it matters. You should be looking to convince your reader, not merely to describe what has been done before.

A good metaphor for the literature is a funnel, starting with the broad topic and why it is of interest and then narrowing down gradually to focus on the specific area that your research is addressing. For example, here is an illustration of what the funnel might look like for my literature review on mindfulness and depression.

Information box 3
Example of the funnel for mindfulness and depression.

The idea is to draw the reader in and to infect them with some of the passion that you have about the area, as well as doing the practical task of summarising past research and justifying your own project.

Once you have a sense of the funnel it is a good idea to come up with the subheadings which will structure your literature review, breaking it down into sections of a few paragraphs each (for example, each of the areas on the above funnel might be a subsection with a subheading). Once you have these written down you can start to consider what the paragraphs will be within each subsection, jotting down a few words for what you want to cover (with what references) in each paragraph. Remember that each paragraph should make one point and then expand on that, before flowing into the next paragraph. Soon you will have a side or two of paper with a complete structure for your literature review. Then it is just a matter of going through and turning each note
Your literature review should summarise past studies, but ensuring that you synthesise them together rather than simply providing a list of one study after the next. For example, you might want to cluster studies which use a similar methodology or have a similar focus into the same paragraph. Pull out any limitations of past research and gaps in the literature here (see chapter 4 on evaluating research) and keep returning to the matter of why this makes your own research worthwhile. Then summarise clearly how your research builds upon this past research, fills gaps, addresses methodological limitations, etc. End by clearly stating your specific research questions/hypotheses (see chapter 3).

Once you are filling in your paragraphs, in terms of style, as previously suggested it is often best to write the first draft in simple English, just as you would if explaining it to a friend, as this is often easier to write and ensures that you are clear and accessible. When you go through and polish this draft into a final version, you can work on getting the writing appropriately academic without loosing this clarity (supervisors and more experienced academics can help you to get the tone right, as can using the papers that you've found most helpful as a model).

Conclusions
We have seen in this chapter that the function of the literature review is more than simply to present the past research on your topic: you also need it to justify your research and why it matters.

Reading, summarising and evaluating previous research in your literature review will also help you to decide upon your own methodology (see chapter 6) and to plan your research (see chapters 7 and 9) as well as noting the major ethical issues in this area that you need to consider (see chapter 8).

The following checklist summarises some of the main ‘dos and don’ts’ when conducting a literature search and review.

Checklist of dos and don’ts
Do
• Search, read, search some more (repeat as necessary!)
• Remember to both broaden and narrow the focus of your literature search to get a reasonable number of materials
• Know when to stop searching (once you have identified what seems to be key)
• Collate a reference list as you go, rather than writing it at the end
• Work to organise and structure your literature search for example by compiling research records (chapter 4) or using a mind map
• Think about the process of writing that works for you (and any blocks) before getting started on writing
• Foster a clear argument by building up your literature review from an initial skeleton structure
• Think about your intended reader: is your argument clear, accessible and engaging?
• Weave together past research rather than summarising one study after another
• Ensure that you justify your research and why it matters
• Make sure your literature review has the required funnel shape
• Get others to read over your work to let you know what makes sense and what needs
clarifying

Don’t
• Feel like you have to find everything ever written on your topic
• Start writing your literature review from the first sentence without structuring it first
• Try to write when you’re not in the right space for it (after the initial hour of writing)
• Attempt to write perfectly in the first draft (you can always go back and polish)
• Simply describe the literature. You need to craft an argument.
• Worry if you have anxieties about writing: everybody does

Suggestions for further sources/reading
The British Association for Counselling and Psychotherapy have produced an information sheet on conducting a literature review which is available through their website: http://www.bacp.co.uk/research/Information_Sheets/R1.php

There are a couple of specific books on how to conduct a literature review:


i See this wikipedia page for a frequently updated lists of academic databases and search engines http://en.wikipedia.org/wiki/List_of_academic_databases_and_search_engines

ii Actually I now know rather more about this having recently written a book on the topic for which I ended up conducting many such literature searches! If you are interested, the book is: Barker, M. (2013). Mindful Counselling & Psychotherapy: Practising Mindfully Across Approaches and Issues. London: Sage.

iii There is a general guide to searching Google Scholar here: http://scholar.google.com/intl/en/scholar/help.html