CHAPTER 3
Reviewing the Literature

In this chapter you will learn about:

- The functions of the literature review in research
- How to carry out a literature search
- How to review the selected literature
- How to develop theoretical and conceptual frameworks
- How to write a literature review

Keywords: *catalogue, conceptual framework, contextualise, Internet, knowledge base, literature review, search engines, summary of literature, thematic writing, theoretical framework.*

The place of the literature review in research

One of the essential preliminary tasks when you undertake a research study is to go through the existing literature in order to acquaint yourself with the available body of knowledge in your area of interest. Reviewing the literature can be time consuming, daunting and frustrating, but it is also rewarding. The **literature review** is an integral part of the research process and makes a valuable contribution to almost every operational step. It has value even before the first step; that is, when you are merely thinking about a research question that you may want to find answers to through your research journey. In the initial stages of research it helps you to establish the theoretical roots of your study, clarify your ideas and develop your research methodology. Later in the process, the literature review serves to enhance and consolidate your own knowledge base and helps you to integrate your findings with the existing body of knowledge. Since an important responsibility in research is to compare your findings with those of others, it is here that the literature review plays an extremely important role. During the write-up of your report it helps you to integrate your findings with existing knowledge – that is, to either support or contradict earlier research. The higher the academic level of your research, the more important a thorough integration of your findings with existing literature becomes.

In summary, a literature review has the following functions:

- It provides a theoretical background to your study.
- It helps you establish the links between what you are proposing to examine and what has already been studied.
- It enables you to show how your findings have contributed to the existing body of knowledge in your profession. It helps you to integrate your research findings into the existing body of knowledge.

In relation to your own study, the literature review can help in four ways. It can:

1. bring clarity and focus to your research problem;

2. improve your research methodology;

3. broaden your knowledge base in your research area; and

4. contextualise your findings.

Bringing clarity and focus to your research problem

The literature review involves a paradox. On the one hand, you cannot effectively undertake a literature search without some idea of the problem you wish to investigate. On the other hand, the literature review can play an extremely important role in shaping your research problem because the process of reviewing the literature helps you to understand the subject area better and thus helps you to conceptualise your research problem clearly and precisely and makes it more relevant and pertinent to your field of enquiry. When reviewing the literature you learn what aspects of your subject area have been examined by others, what they have found out about these aspects, what gaps they have identified and what suggestions they have made for further research. All these will help you gain a greater insight into your own research questions and provide you with clarity and focus which are central to a relevant and valid study. In addition, it will help you to focus your study on areas where there are gaps in the existing body of knowledge, thereby enhancing its relevance.

Improving your research methodology

Going through the literature acquaints you with the methodologies that have been used by others to find answers to research questions similar to the one you are investigating. A literature review tells you if others have used procedures and methods similar to the ones that you are proposing, which procedures and methods have worked well for them and what problems they have faced with them. By becoming aware of any problems and pitfalls, you will be better positioned to select a methodology that is capable of providing valid answers to your research question. This will increase your confidence in the methodology you plan to use and will equip you to defend its use.

Broadening your knowledge base in your research area

The most important function of the literature review is to ensure you read widely around the subject area in which you intend to conduct your research study. It is important that you know what other researchers have found in regard to the same or similar questions, what theories have been put forward and what gaps exist in the relevant body of knowledge. When you undertake a research project for a higher degree (e.g. an MA or a PhD) you are expected to be an expert in your area of research. A thorough literature review helps you to fulfil this expectation. Another important

reason for doing a literature review is that it helps you to understand how the findings of your study fit into the existing body of knowledge (Martin 1985: 30).

Enabling you to contextualise your findings

Obtaining answers to your research questions is comparatively easy: the difficult part is examining how your findings fit into the existing body of knowledge. How do answers to your research questions compare with what others have found? What contribution have you been able to make to the existing body of knowledge? How are your findings different from those of others? Undertaking a literature review will enable you to compare your findings with those of others and answer these questions. It is important to place your findings in the context of what is already known in your field of enquiry.

How to review the literature

If you do not have a specific research problem, you should review the literature in your broad area of interest with the aim of gradually narrowing it down to what you want to find out about. After that the literature review should be focused around your research problem. There is a danger in reviewing the literature without having a reasonably specific idea of what you want to study. It can condition your thinking about your study and the methodology you might use, resulting in a less innovative choice of research problem and methodology than otherwise would have been the case. Hence, you should try broadly to conceptualise your research problem before undertaking your major literature review.

There are four steps involved in conducting a literature review:

1. Searching for the existing literature in your area of study.

2. Reviewing the selected literature.

3. Developing a theoretical framework.

4. Developing a conceptual framework.

The skills required for these tasks are different. Developing theoretical and conceptual frameworks is more difficult than the other tasks.

Searching for the existing literature

To search effectively for the literature in your field of enquiry, it is imperative that you have at least some idea of the broad subject area and of the problem you wish to investigate, in order to set parameters for your search. Next, compile a bibliography for this broad area. There are three sources that you can use to prepare a bibliography:

(a) books;
(b) journals;
(c) the Internet.

Books

Though books are a central part of any bibliography, they have their disadvantages as well as advantages. The main advantage is that the material published in books is usually important and of good quality, and the findings are 'integrated with other research to form a coherent body of knowledge' (Martin 1985: 33). The main disadvantage is that the material is not completely up to date, as it can take a few years between the completion of a work and its publication in the form of a book.

The best way to search for a book is to look at your library catalogues. When librarians catalogue a book they also assign to it subject headings that are usually based on *Library of Congress Subject Headings*. If you are not sure, ask your librarian to help you find the best subject heading for your area. This can save you a lot of time. Publications such as *Book Review Index* can help you to locate books of interest.

Use the *subject catalogue* or *keywords* option to search for books in your area of interest. Narrow the subject area searched by selecting the appropriate keywords. Look through these titles carefully and identify the books you think are likely to be of interest to you. If you think the titles seem appropriate to your topic, print them out (if this facility is available), as this will save you time, or note them down on a piece of paper. Be aware that sometimes a title does not provide enough information to help you decide if a book is going to be of use so you may have to examine its contents too.

When you have selected 10–15 books that you think are appropriate for your topic, examine the bibliography of each one. It will save time if you photocopy their bibliographies. Go through these bibliographies carefully to identify the books common to several of them. If a book has been referenced by a number of authors, you should include it in your reading list. Prepare a final list of books that you consider essential reading.

Having prepared your reading list, locate these books in your library or borrow them from other sources. Examine their contents to double-check that they really are relevant to your topic. If you find that a book is not relevant to your research, delete it from your reading list. If you find that something in a book's contents is relevant to your topic, make an annotated bibliography. An annotated bibliography contains a brief abstract of the aspects covered in a book and your own notes of its relevance. Be careful to keep track of your references. To do this you can prepare your own card index or use a computer program such as Endnotes or Pro-Cite.

Journals

You need to go through the journals relating to your research in a similar manner. Journals provide you with the most up-to-date information, even though there is often a gap of two to three years between the completion of a research project and its publication in a journal. You should select as many journals as you possibly can, though the number of journals available depends upon the field of study – certain fields have more journals than others. As with books, you need to prepare a list

of the journals you want to examine for identifying the literature relevant to your study. This can be done in a number of ways. You can:

- locate the hard copies of the journals that are appropriate to your study;
- look at citation or abstract indices to identify and/or read the abstracts of such articles;
- search electronic databases.

If you have been able to identify any useful journals and articles, prepare a list of those you want to examine, by journal. Select one of these journals and, starting with the latest issue, examine its contents page to see if there is an article of relevance to your research topic. If you feel that a particular article is of interest to you, read its abstract. If you think you are likely to use it, depending upon your financial resources, either photocopy it, or prepare a summary and record its reference for later use.

There are several sources designed to make your search for journals easier and these can save you enormous time. They are:

- indices of journals (e.g. *Humanities Index*);
- abstracts of articles (e.g. *ERIC*);
- citation indices (e.g. *Social Sciences Citation Index*).

Each of these indexing, abstracting and citation services is available in print, or accessible through the Internet.

In most libraries, information on books, journals and abstracts is stored on computers. In each case the information is classified by subject, author and title. You may also have the keywords option (author/keyword; title/keyword; subject/keyword; expert/keyword; or just keywords). What system you use depends upon what is available in your library and what you are familiar with.

There are specially prepared electronic databases in a number of disciplines. These can also be helpful in preparing a bibliography. For example, most libraries carry the electronic databases shown in Table 3.1.

Select the database most appropriate to your area of study to see if there are any useful references. Of course, any computer database search is restricted to those journals and articles that are already on the database. You should also talk to your research supervisor and other available experts to find out about any additional relevant literature to include in your reading list.

TABLE 3.1 *Some commonly used electronic databases in public health, sociology, education and business studies*

Electronic database	Description	Printed equivalent
ABI/INFORM	Abstracted Business Information contains references to business information worldwide. It covers subjects such as accounting, banking, data processing, economics, finance, health care, insurance, law, management, marketing, personnel, product development, public administration, real estate, taxation and telecommunications	None
ERIC	ERIC is a database of educational material collected by the Education Resources Information Center of the US Department of Education. It covers subjects such as adult career or vocational education, counselling and personnel services, educational management, primary and early childhood education, handicapped and gifted children, higher education, information resources, language and linguistics, reading and communication, rural education, science, mathematics and environment education, social science education, teacher education, secondary education, evaluation and urban education	CIJE: Current Index to Journals in Education
HEALTHROM	HEALTHROM provides references and some full-text publications on the environment, health, HIV/AIDS and communicable diseases, Aboriginal health, clinical medicine, nutrition, alcohol and drug addiction	None
MEDLINE	MEDLINE contains references to material in the biomedical sciences, including medicine, pharmacology, nursing, dentistry, allied health professions, public health, behavioural sciences, physiotherapy, occupational therapy, medical technology, hospital administration, and basic sciences such as anatomy and physiology	Index Medicus
CINAHL	CINAHL (Cumulative Indices to Nursing and Allied Health Literature) provides access to virtually all English-language nursing journals and primary journals from 13 allied health disciplines including health education, medical records, occupational therapy, physical therapy and radiologic technology	Cumulative indices to nursing and allied health literature

The Internet

In almost every academic discipline and professional field, the Internet has become an important tool for finding published literature. Through an Internet search you can identify published material in books, journals and other sources with immense ease and speed.

An Internet search is carried out through search engines, of which there are many, though the most commonly used are *Google* and *Yahoo*. Searching through the Internet is very similar to the search for books and articles in a library using an electronic catalogue, as it is based on the use of keywords. An Internet search basically identifies all material in the database of a search engine that contains the keywords you specify, either individually or in combination. It is important that you choose words or combinations of words that other people are likely to use.

According to Gilbert (2008: 73), 'Most search facilities use Boolean logic, which allows three types of basic search "AND", "OR" and "NOT".' With practice you will become more efficient and effective in using keywords in combination with AND, OR and NOT, and so learn to narrow your search to help you identify the most relevant references.

Reviewing the selected literature

Now that you have identified several books and articles as useful, the next step is to start reading them critically to pull together themes and issues that are of relevance to your study. Unless you have a theoretical framework of themes in mind to start with, use separate sheets of paper for each theme or issue you identify as you go through selected books and articles. The following example details the process.

The author recently examined, as part of an evaluation study, the extent of practice of the concept of 'community responsiveness' in the delivery of health services in Western Australia by health service providers. Before evaluating the extent of its use, pertinent literature relating to 'community responsiveness in health' was identified and reviewed. Through this review, many themes emerged, which became the basis of developing the theoretical framework for the study. Out of all of this, the following themes were selected to construct the theoretical framework for the evaluation study:

- Community responsiveness: what does it mean?
- Philosophies underpinning community responsiveness.
- Historical development of the concept in Australia.
- The extent of use in health planning?
- Strategies developed to achieve community responsiveness.
- Indicators of success or failure.
- Seeking community participation.
- Difficulties in implementing community responsiveness.
- Attitude of stakeholders towards the concept of community responsiveness.

Once you develop a rough framework, slot the findings from the material so far reviewed into these themes, using a separate sheet of paper for each theme of the framework so far developed. As you read further, go on slotting the information where it logically belongs under the themes so far developed. Keep in mind that you may need to add more themes as you go along. While going through the literature you should carefully and critically examine it with respect to the following aspects:

- Note whether the knowledge relevant to your theoretical framework has been confirmed beyond doubt.
- Note the theories put forward, the criticisms of these and their basis, the methodologies adopted (study design, sample size and its characteristics, measurement procedures, etc.) and the criticisms of them.
- Examine to what extent the findings can be generalised to other situations.
- Notice where there are significant differences of opinion among researchers and give your opinion about the validity of these differences.
- Ascertain the areas in which little or nothing is known – the gaps that exist in the body of knowledge.

Developing a theoretical framework

Examining the literature can be a never-ending task, but as you have limited time it is important to set parameters by reviewing the literature in relation to some main themes pertinent to your research topic. As you start reading the literature, you will soon discover that the problem you wish to investigate has its roots in a number of theories that have been developed from different perspectives. The information obtained from different books and journals now needs to be sorted under the main themes and theories, highlighting agreements and disagreements among the authors and identifying the unanswered questions or gaps. You will also realise that the literature deals with a number of aspects that have a direct or indirect bearing on your research topic. Use these aspects as a basis for developing your theoretical framework. Your review of the literature should sort out the information, as mentioned earlier, within this framework. Unless you review the literature in relation to this framework, you will not be able to develop a focus in your literature search: that is, your theoretical framework provides you with a guide as you read. This brings us to the paradox mentioned previously: until you go through the literature you cannot develop a theoretical framework, and until you have developed a theoretical framework you cannot effectively review the literature. The solution is to read some of the literature and then attempt to develop a framework, even a loose one, within which you can organise the rest of the literature you read. As you read more about the area, you are likely to change the framework. However, without it, you will get bogged down in a great deal of unnecessary reading and note-taking that may not be relevant to your study.

Literature pertinent to your study may deal with two types of information:

1. universal;

2. more specific (i.e. local trends or a specific programme).

In writing about such information you should start with the general information, gradually narrowing it down to the specific.

Look at the example in Figure 3.1a and 3.1b

If you want to study the relationship between mortality and fertility, you should review the literature about:

- *fertility* – trends, theories, some of the indices and critiques of them, factors affecting fertility, methods of controlling fertility, factors affecting acceptance of contraceptives, and so on;
- *mortality* – factors affecting mortality, mortality indices and their sensitivity in measuring change in mortality levels of a population, trends in mortality, and so on; and, most importantly,
- *the relationship between fertility and mortality* – theories that have been put forward to explain the relationship, implications of the relationship.

Out of this literature review you need to develop the theoretical framework for your study. Primarily this should revolve around theories that have been put forward about the relationship between mortality and fertility. You will discover that a number of theories have been proposed to explain this relationship. For example, it has been explained from economic, religious, medical and psychological perspectives. Within each perspective several theories have been put forward: 'insurance theory', 'fear of non-survival', 'replacement theory', 'price theory', 'utility theory', 'extra' or 'hoarding theory' and 'risk theory'.

Your literature review should be written under the following headings, with most of the review involving the examination of the relationships between fertility and mortality:

- fertility theories;
- the theory of demographic transition;
- trends in fertility (global, and then narrow it to national and local levels);
- methods of contraception (their acceptance and effectiveness);
- factors affecting mortality;
- trends in mortality (and their implications);
- measurement of mortality indices (their sensitivity);
- *relationships between fertility and mortality* (different theories such as 'insurance', 'fear of non-survival', 'replacement', 'price', 'utility', 'risk' and 'hoarding').

FIGURE 3.1a   *Developing a theoretical framework – the relationship between mortality and fertility*

Note: *Preliminary discussions with some stakeholders revealed that not much was known to them about community responsiveness and therefore it was proposed that the study be carried out in two phases: preparatory phase and actual evaluation phase. The main aim of the preparatory phase was to ascertain the understanding of the concept, identify the strategies that are being or can be used, and developing a set of indicators for measuring its success or failure. This framework became the basis of the first phase of the study.*
    The review of literature was written around the following theoretical framework which, of course, emerged from the literature review itself.

Community responsiveness: What do the stakeholders (service providers, service managers and the consumers) understand by community responsiveness, why it is needed, and what purpose does it serve?
Historical and philosophical perspectives: Start of the concept, an historical overview of its emergence, philosophical perspective that underpins the concept.
Implementation strategies: What strategies have been used to achieve community responsiveness in the service delivery area?
Attitude of the stakeholders: What are the attitudes of service providers, service managers and consumers of the services towards community responsiveness?
Evaluation of community responsiveness: What indicators can be used to determine the impact of these strategies, what should determine the success or failure of the implementation of the strategies and who and how should it be determined?

FIGURE 3.1b   *Theoretical framework for the study 'community responsiveness in health'*

Developing a conceptual framework

The conceptual framework is the basis of your research problem. It stems from the theoretical framework and usually focuses on the section(s) which become the basis of your study. Whereas the theoretical framework consists of the theories or issues in which your study is embedded, the conceptual framework describes the aspects you selected from the theoretical framework to

become the basis of your enquiry. For instance, in the example cited in <u>Figure 3.1a</u>, the theoretical framework includes all the theories that have been put forward to explain the relationship between fertility and mortality. However, out of these, you may be planning to test only one, say the fear of non-survival. Similarly, in <u>Figure 3.1b</u>, the conceptual framework is focused on indicators to measure the success or failure of the strategies to enhance community responsiveness. Hence the conceptual framework grows out of the theoretical framework and relates to the specific research problem.

Writing about the literature reviewed

Now, all that remains to be done is to write about the literature you have reviewed. As mentioned in the beginning of this chapter, two of the broad functions of a literature review are (1) to provide a theoretical background to your study and (2) to enable you to contextualise your findings in relation to the existing body of knowledge in addition to refining your methodology. The content of your literature review should reflect these two purposes. In order to fulfil the first purpose, you should identify and describe various theories relevant to your field; and specify gaps in existing knowledge in the area, recent advances in the area of study, current trends and so on. In order to comply with the second function, you should integrate the results from your study with specific and relevant findings from the existing literature by comparing the two for confirmation or contradiction. Note that at this stage you can only accomplish the first function of the literature review, to provide a theoretical background to your study. For the second function, the contextualization of the findings, you have to wait till you are at the research report writing stage.

While reading the literature for theoretical background of your study, you will realize that certain themes have emerged. List the main ones, converting them into subheadings. Some people write up the entire literature review in one section, entitled 'Review of the literature', 'Summary of literature' or 'The literature review', without subheadings, but the author strongly suggests that you write your literature review under subheadings based upon the main themes that you have discovered and which form the basis of your theoretical framework. These subheadings should be precise, descriptive of the theme in question and follow a logical progression. Now, under each subheading, record the main findings with respect to the theme in question (thematic writing), highlighting the reasons for and against an argument if they exist, and identifying gaps and issues. shows the subheadings used to describe the themes in a literature review conducted by the author for a study entitled 'Intercountry adoption in Western Australia'.

FIGURE 3.2 *Sample of outline of a literature review*

The second broad function of the literature review – contextualising the findings of your study – requires you to compare very systematically your findings with those made by others. Quote from these studies to show how your findings contradict, confirm or add to them. It places your findings in the context of what others have found out providing complete reference in an acceptable format. This function is undertaken, as mentioned earlier, when writing about your findings, that is after analysis of your data.

Summary

Reviewing the literature is a continuous process. It begins before a research problem is finalised and continues until the report is finished. There is a paradox in the literature review: you cannot undertake an effective literature review unless you have formulated a research problem, yet your literature search plays an extremely important role in helping you to formulate your research problem. The literature review brings clarity and focus to your research problem, improves your research methodology and broadens your knowledge base.

Reviewing the literature involves a number of steps: searching for existing literature in your area of study; reviewing the selected literature; using it to develop a theoretical framework from which your study emerges and also using it to develop a conceptual framework which will become the basis of your investigation. The main sources for identifying literature are books, journals and the Internet. There are several sources which can provide information about locating relevant journals.

The literature review serves two important function: (1) it provides theoretical background to your study, and (2) it helps you to contextualise your findings by comparing them with what others have found out in relation to the area of enquiry. At this stage of the research process, only the first function can be fulfilled. You can only take steps to achieve the second function when you have analysed your data and are in the process of writing about your findings.

Your writing about the literature reviewed should be thematic in nature, that is based on main themes; the sequence of these themes in the write-up should follow a logical progression; various arguments should be substantiated with specific quotations and citations from the literature and should adhere to an acceptable academic referencing style.

For You to Think About

- Refamiliarise yourself with the keywords listed at the beginning of this chapter and if you are uncertain about the meaning or application of any of them revisit these in the chapter before moving on.
- Undertake a keyword search for a theme or issue that interests you using (a) an Internet search engine, such as Google Scholar, and (b) a library search facility. Compare the results.

- Choose two or three research reports from your search and scan through the summaries noting the theories put forward, the methodologies adopted and any recommendations for further study. Do these reports point to a consensus or differences of opinion in the field?
- Develop a theoretical framework for the theme or issue you selected.