Doing Your Literature Review

traditional and systematic techniques

Jill K. Jesson with Lydia Matheson and Fiona M. Lacey

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INTRODUCTION

Who is this book for?

This book is intended to be a practical study guide that complements the growing body of guidance on research methodology, and in particular complements the specialised niche of texts on doing a literature review. Since Hart's seminal contribution to 'doing a literature review' in the late 1980s, the methodology of literature review has advanced at a remarkable pace. The take up of the systematic review methodology from biological sciences into other academic disciplines has added considerably to the debate by introducing a more questioning and critical approach to performing a literature review and the manner in which 'traditional reviews' are compiled.

We believe that anyone who has to do a literature review, at whatever level of expertise, will find this book useful. The book is predominantly intended for use by postgraduate students doing their Masters or MBA research dissertation. It should also be of use to anyone studying at PhD level, where it is more likely that a systematic approach to literature to review (or even the use of the systematic review methodology) could be appropriate.

How is this book different?

We assume that our readers have already studied research methodology, or are currently studying on a research methods course. Thus one key point to note is that we do tend to concentrate on the 'know how' dimension. There are many excellent research method textbooks which adequately cover aspects of philosophy of research and the techniques of designing qualitative and quantitative research. This is not to say that research philosophy is not important; students do need to know about research philosophy and about research paradigms, particularly the ways in which research methodology and beliefs have evolved over time, their relative status and importance in different academic disciplines. We do expect you to have a working knowledge of research terminology and methodology, but just in case of difficulties provide a glossary with key concepts to help you.

Our aim is to produce a practical simple guide to meet the needs of a wide range of students. We are conscious that many students want to have easily accessible textbooks, and in particular many postgraduate students are studying and working at the same time, or are distance learners. Some students come to postgraduate studies with a wealth of work experience, but it has been a long time since they were engaged in academic studies and they do need advice on where to begin and how to go about reading articles and making notes before constructing their review. We hope this book will meet that need.

The book is intended to be accessible for researchers from any academic background, so we have borrowed from many disciplines and have chosen from a wide spectrum of topics covering health, environment, business and management fields to illustrate points and techniques. Health and business management subjects tend to predominate because these are the subjects with which we are most familiar; but you do not need to be an expert in any subject to take in the point being made. Topics covered by examples are varied, covering health, pharmacy, finance and business acquisition, supply chain, organisation and management change, and topical environmental issues of recycling. Where possible we use published examples of reviews that illustrate a point being made, the date of publication is less relevant. We acknowledge here the great intellectual debt we owe to the authors whose work we use.

The rationale and history behind the contribution from researchers and from an information specialist

This book has been written by three people from very different backgrounds – social science, pharmaceutical science and library information sciences – thus it has a built-in multidisciplinary approach. We believe that the combination can provide insights that are not always evident in single-subject work.

The social science researcher

Early ideas for this book began when I first started teaching the lecture on 'critical literature review' in Aston Business School in a postgraduate Applied Research Module. I could not recall as an undergraduate or postgraduate student ever being taught anything about reviewing literature. I discovered that many standard research methodology texts did not cover the literature review as a method in itself, although most described the search for information.

Although it is fairly straightforward to teach research methodologies, the part of their research that most students find difficult is writing a critical review of existing knowledge – the traditional literature review. Moreover, we are aware that many students studying for an MSc or MBA who do not have a first degree background in the social sciences have rarely undertaken a research project before. International students sometimes find the need to take a critical approach to literature review as problematic and have to learn how to do it.

The first step in research is to assess what is already known – but until recently this has not been recognised as a research skill in its own right. This skill has to be learnt – the ability to produce 'good' literature reviews does not come naturally. Aside from Hart (1998) there was no text that we could refer students to. This remained the case up until about five years ago when some new texts on the research method of systematic review were published. These books have their own unique selling point and are a complementary source of additional, specialist information for those studying health and social care or education research (listed in Appendix 1). We did write something for our own students (Jesson and Lacey, 2006), but there is still no text covering both traditional literature review and systematic review.

There are still few textbooks that deal specifically with the complete procedures involved in what we refer to as a traditional literature review. It is a major contention of this book that researchers have to be able to undertake a traditional literature review as a preparation to moving on to do systematic review. So this book is important for anyone planning to use the systematic review methodology.

A further strong reason for the need for a new generalist textbook is the current focus on the evidence-based movement, which depends on good systematic reviews of current knowledge. So, whether searching for evidence for professional practice, public policy or business management, this is an important approach to literature review which students should be aware of and be able to do. After undertaking a systematic review myself, I now have it clear in my own mind that we have to be able to do a traditional review – we might call it a scoping review – before we can take on the more concise but comprehensive systematic review.

The library information specialist

In this book we want to show the importance to researchers of the library and information specialists. Inviting a librarian to contribute the literature search chapter in this work is beneficial because of the close relationship between

library, knowledge and research. At Aston University, we involve the information specialists in teaching literature search skills to students. This is the contribution made by Lydia Matheson, who is responsible for writing Chapters 2 and 9. Most librarians are skilled researchers: they know how and where to find information. They have experience of searching for resources both in traditional print media and in electronic databases and within what appear to me to be complex internet websites. In universities they often specialise, so whether the subject is business and management or social science or health sciences, they can show you how to do your initial search. The rise of the internet, electronic journals, and access to many public documents has widened the scope and range of information available to the extent that you do not have to go into the library these days to access most of what you want.

The pharmacist researcher

The second contribution comes from Fiona Lacey. Together, we have undertaken several research studies. The contribution from Fiona illustrates the current trend for multidisciplinary collaborative research. Fiona's background is in pre-clinical research and, in addition, she now teaches research methods and supervises Masters-level pharmacy dissertations, an increasing proportion of which are based on systematic review and meta-analysis.

Features of the book

We believe that an important feature of this textbook is its simplicity of language, with the use of 'I' and 'we' instead of the normal academic impersonal passive voice or third-person form, using real-world illustrations and examples from a range of subject areas. The examples are taken from top quality academic journals, from government policy reports and from our own and student works. For readers to get the maximum benefit from examples used we suggest that you look up the original source material. Our intention is that the book will provide an easy introduction to a research task (performing a literature review), which all researchers can relate to with confidence.

One other feature is the importance placed on time management and planning. Chapters 1 and 3 contain a Gantt checklist. Managing your time to meet deadlines is one of the most challenging features in doing applied research. Although there was an original Gantt chart/checklist time plan for this book, there were several unanticipated delays in the writing process. We had not appreciated how long writing a book would take, alongside teaching, marking and doing research, but the time plan on the wall was a constant reminder to

get on with it. To effectively manage your time you need to estimate how long each stage/task will take. This book will help you do that.

Layout of the book

As you progress through the book you will move from the basic skills of reading and note-making into the search for information; experienced researchers might want to skim read these sections. In the second part you will learn how to do a traditional literature review before moving on to the more challenging and time-demanding systematic review. Meta-analysis is a specialised synthesis method for advanced reviewers, but here we provide a need-to-know introduction for those interested in the methodology.

Part I provides a general introduction to literature review, to searching, reading, and note-making skills. Part II guides you through the reviewing, synthesis and write-up stages.

Chapter 1 covers definitions: What is a literature review? When would you do a literature review? And which one is appropriate when? Most students are taught to use only highly rated journals, so information on journal rating and peer review issues are discussed in a critical way. Students' ability to use new technology is amazing; nevertheless there is evidence to suggest that their ability to search for and evaluate information on the web is still in question. Some students may over rely on Google, without exploring the wider resources made freely available to them. In Chapter 2 Lydia Matheson provides a technical approach to searching. She introduces the range of resources available through the academic library, covering digital and electronic libraries, and other useful sites. The process of searching is explained step by step. Although the examples are based on Aston University library, the features are likely to be substantially similar in any academic library. Since the electronic provision of material is constantly changing, this work represents a snapshot in time. Chapter 3 focuses on different aspects of reading skills that might help you – how to scan, skim and focus, together with advice on tackling different types of document. Chapter 4 covers the very important topic of writing skills.

Part II presents the detailed steps to produce a traditional review, a systematic review, and a meta-analysis.

Chapter 5 begins the guidance on doing a traditional literature review, and is followed with some suggestions on critical analysis and writing up in Chapter 6. Chapter 7 describes the protocol and procedures necessary to undertake a systematic review. To illustrate points the chapter includes details of a review undertaken specifically for this book. In Chapter 8 Fiona Lacey uses a question-and-answer format to guide you through the basics of the

more specialised meta-analysis methodology. Finally, in Chapter 9, Lydia Matheson reminds you of the vital importance of the accurate referencing of material, avoiding the pitfall of plagiarism and falling foul of copyright laws.

If you are a beginner setting out on improving your review skills, work your way through the text to Chapters 5 and 6. If your goal is to undertake a systematic review, you would benefit from reading all the chapters. Whatever your needs, I hope you find the book useful.

PART 1

GETTING INFORMATION

1

PRELIMINARIES

Key Points

- A literature review is a *re-view* of something that has already been written
- A traditional review can vary in format and style
- A systematic review is governed by a prescribed methodology – it is a research method and is used to address a specific research question
- It is possible to work systematically in your literature review, but that does not mean it is a systematic review

What is a literature review?

This book is a guide to undertaking a literature review, in which we emphasise that the literature review can be a research method in its own right. We explain that the literature review is a written product; the format varies depending on the purpose of the review. In most instances, the review will be part of a research project and dissertation, but it can be a stand-alone review, one that is not a chapter in a research dissertation or thesis. We are interested in the process of creating a review. Much more attention has been focused on improving the quality of literature reviews, as awareness of the systematic review protocol, with a defined methodology, has raised expectations of what can be achieved by all of us when reviewing literature.

Since the promotion of systematic review as a specialist review in the fields of evidence-based practice, which uses a prescribed, systematic methodological approach, we have an alternative way to review the literature. The systematic review produces an output – for example, a statement of findings to inform policy development – that may not necessarily lead into new research.

The aim of this opening chapter is to present an overview focusing on the context of doing a literature review. We consider some scenarios when you might undertake a review of literature. There is a short discussion of the relationship between a research question and a research project. Literature review is a library or desk-based method involving the secondary analysis of explicit knowledge, so abstract concepts of explicit and tacit knowledge are explored. We critically examine the notion of

peer review and challenge the faith placed on the peer review process. The chapter closes with guidance on project planning and time management.

Why do a literature review?

As an academic task the literature review is where you show that you are both aware of and can interpret what is already known and where eventually you will be able to point out the contradictions and gaps in existing knowledge. As with any piece of research, you will have to explain why your review is important, why it is different and what it adds to knowledge. In research, we seek to be original and to make an original contribution to knowledge. In the literature review context that means creating a new dimension or fresh perspective that makes a distinct contribution. There are many reasons for carrying out a literature review, so students should ensure that they are aware of what *they* are being asked to do and ensure that their review does what is required.

Taken as its simplest, traditional form a literature review is a 're-viewing' of the literature. Every student will at some point in their academic career be asked to carry out a review of the literature, usually as part of completing a research project. Sometimes the task is just to carry out a review of the literature as a dissertation in its own right. So let's begin with definitions.

Terminology used in this book

We need to have a common language to describe the different styles of literature review. Throughout the book we have labelled our two styles of review as 'traditional literature review' and 'systematic review' to differentiate them, although in practice the boundaries can be less marked. We will examine these two styles of review and then consider the word 'systematic' because this notion is often misunderstood and hence misused.

Task

Look at the research method textbooks you are using and see how the term 'literature review' is defined.

Traditional literature review

A literature review is a written appraisal of what is already known – existing knowledge on a topic – with no prescribed methodology. Later in the book you will see that this basic model of a literature review can be complemented by a more scientifically prescribed model, the systematic review. Figure 1.1 represents the two types as ends of a continuum.

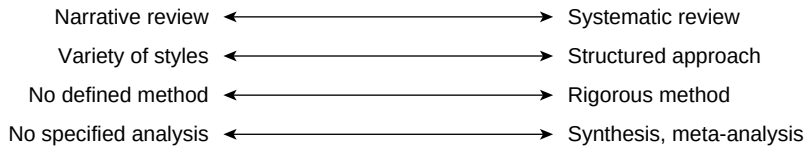

Figure 1.1 A continuum of literature review approaches

How is the literature review defined in other textbooks? The two examples which follow are taken from business research textbooks. First, Jankowitz (2005) emphasises the process of building on existing work, but with a focus on *describing* and then bringing the work together in a *critical* way. This illustrates a use of the concept or term 'critical'.

> There is little point in reinventing the wheel. Whatever your epistemology, the work that you do is not done in a vacuum, but builds on the ideas of other people who have studied the field before you. This requires you to *describe* what has been published and to marshal the information in a relevant and *critical* way. (Jankowitz, 2005: 161, emphasis added)

Writing at the same time, Blumberg et al. (2005, emphasis added) discuss the literature review and here the emphasis is on individual contribution – as interpretation: 'An academic document which must have a logical structure, the aim and objectives and purpose need to be clear to the reader – it is an appropriate *summary* of previous work. But it needs an added dimension – your *interpretation*'.

Example 1.1 provides selected sentences from an article showing how the authors classify their review as a thematic analysis and state why it is not a systematic review.

Example 1.1

Recognising a traditional review. Extract taken from: 'Is the increasing policy use of Impact Assessment (IA) in Europe likely to undermine efforts to achieve healthy public policy?' (Smith et al., 2010)

This is an essay that provides a thematic analysis of literature concerning IA and associated tools and a related assessment of the European Union's new integrated IA tool (2010: 478).

This essay takes a public health perspective in interpreting literature that critically examines Impact Assessment (IA) and related tools (namely cost–benefit analysis, CBA), which share the same basic elements as IA. This body of work is vast, divergent and largely theoretical, and *not, therefore, appropriate for a traditional systematic review.* (2010: 480, emphasis added)