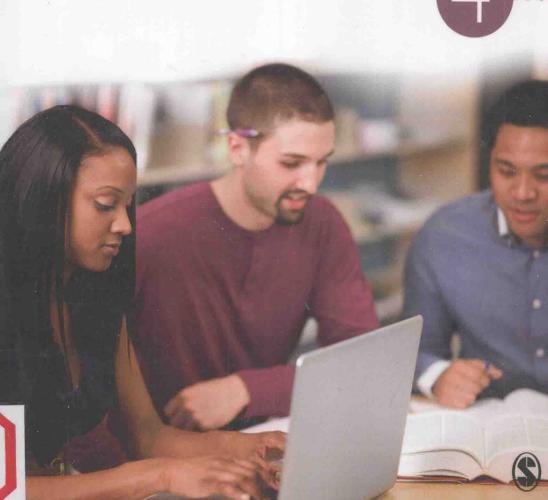
CONDUCTING RESEARCH LITERATURE REVIEWS

From the Internet to Paper

Arlene Fink



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PREFACE

In 2012, about 1.8 zettabytes (or 1.8 trillion gigabytes) of data were created, the equivalent to having every U.S. citizen write three tweets per minute for 26,976 years. And over the next decade, the number of servers managing the world's data stores will grow by ten times. It should come as no surprise then, that the results of tens of thousands of studies appear online and in print.

How can an individual identify and make sense of the voluminous amount of currently available information on every topic in education, health, social welfare, psychology, and business? What standards can be used to distinguish good and poor studies?

This book, like the previous three editions, is for anyone who wants answers to these questions. Its primary purposes are to teach readers to identify, interpret, and analyze the published and unpublished research literature. Specifically, readers are instructed in how to do the following:

- Identify valid online bibliographic/articles databases
- Determine how to search for literature using key words, descriptors, identifiers, and thesauruses
- Use Boolean operators to refine a search
- · Identify and deal with unpublished studies
- Organize the research literature by using bibliographic software
- Set inclusion and exclusion criteria to produce useful and valid information
- Justify a method for identifying and reviewing only the "highest quality" literature
- Prepare a structured abstraction form
- · Create evidence tables
- Ensure and measure the reliability and validity of the review
- Synthesize and report results as part of proposals and papers or as a stand-alone report

- Evaluate qualitative research studies
- Conduct and evaluate descriptive literature reviews
- Understand and evaluate meta-analytic research

The book provides flow diagrams to assist the reader in linking each step of the review to the contents of each chapter and offers exercises linked to the goals.

NEW TO THE FOURTH EDITION

- Nearly a hundred online examples and references from the social, behavioral, and health sciences
- A revised and updated list of online articles databases
- Case studies in the use of major online databases
- Expansion of the exercises at the end of the chapter to include more online searching
- Clarification of some of the basic concepts of research that are essential in making judgments about the quality of research methods
- Explanation of the major available formal systems (such as CONSORT, TREND, PRISMA) for evaluating the literature's transparency and quality
- More qualitative research examples and guidelines and checklists for evaluating their quality
- · Discussion and examples of mixed-methods research
- Additional examples of how to write up reviews and how others have done it

This book is written for all who want to uncover the current status of knowledge about social, educational, business, and health problems. This includes students, researchers, marketers, planners, and policy makers who design and manage public and private agencies, conduct studies, and prepare strategic plans and grant proposals. Every grant proposal, for instance, requires applicants to provide evidence that they know the literature and can justify the need for the grant on the basis of what is and is not known about a topic. Also, strategic and program planners are interested in finding out what is known about "best practices" in order to define programmatic missions and

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plan activities as diverse as marketing goods and services, preventing child abuse, and setting up school voucher systems. Any individual with admittance to a virtual or real library can use this book.

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ONE

REVIEWING THE LITERATURE

Why? For Whom? How?

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A Reader's Guide

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Purpose of This Chapter

This chapter gives an overview of the process of doing research reviews and illustrates how they are used. A main objective is to demonstrate how to do online searches of the research literature using major bibliographic or article databases. The chapter provides guidelines on how to ask specific questions of these databases and how to search for information using key words, thesauruses, and Boolean logic. The chapter also discusses methods for supplementing online searches with manual or hand searches of references lists and guidance from experts. Finally, the chapter concludes with a discussion of how to organize and store literature using bibliographic or reference software.

Research literature reviews have many uses. You find them in proposals for funding and for academic degrees, in research articles, in guidelines for professional and evidence-based practice, and in reports to satisfy personal curiosity. Research reviews, unlike subjective reviews, are comprehensive and easily reproducible.

Research reviewers are explicit about their research questions, search strategy, inclusion and exclusion criteria, data extraction methods, standards for evaluating study quality, and techniques for synthesizing and analyzing their findings. Subjective reviewers choose articles without justifying their search strategy, and they may give equal credence to good and poor studies. The results of subjective reviews are often based on a partial examination of the available literature, and the findings may be inaccurate or even false.

Figure 1.1 shows the steps involved in conducting a research literature review. This chapter covers the shaded portions of the figure: selecting research questions and bibliographic databases and Web sites, choosing search terms, and asking experts to review your methods.

WHAT IS A RESEARCH LITERATURE REVIEW? WHY DO ONE?

A research literature review is a systematic, explicit, and reproducible method for identifying, evaluating, and synthesizing the existing body of completed and recorded work produced by researchers, scholars, and practitioners.

The scholarship and research on which you base the review comes from individuals in diverse professions, including health, education, psychology, business, finance, law, and social services. A research review bases its conclusions on the original work of scholars and researchers. Focusing on high-quality original research rather than on interpretations of the findings is the only guarantee you have that the results of the review will be under your supervision and accurate.

A research literature review can be divided into seven tasks:

- 1. Selecting research questions. A research question is a precisely stated question that guides the review.
- 2. Selecting bibliographic or article databases, Web sites, and other sources. A bibliographic database is a collection of articles, books, and reports that can provide data to answer research questions. The database is usually accessed online. The bibliographic databases of interest in research reviews often contain full reports of original studies. Other sources for literature reviews include experts in the field of interest, the Web, and the reference lists contained in articles.
- 3. Choosing search terms. Search terms are the words and phrases that you use to get appropriate articles, books, and reports. You base them on the words and concepts that frame the research questions and you use a particular grammar and logic to conduct the search.

Figure 1.1 Steps Involved in Conducting a Research Literature Review

