WRITING LITERATURE REVIEWS

A Guide for Students of the Social and Behavioral Sciences



EDITION

Jose L. Galvan and Melisa C. Galvan



Writing Literature Reviews

This useful guide educates students in the preparation of literature reviews for term projects, theses, and dissertations. The authors provide numerous examples from published reviews that illustrate the guidelines discussed throughout the book.

New to the seventh edition:

- Each chapter breaks down the larger holistic review of literature exercise into a series of smaller, manageable steps
- Practical instructions for navigating today's digital libraries
- Comprehensive discussions about digital tools, including bibliographic and plagiarism detection software
- Chapter activities that reflect the book's updated content
- New model literature reviews
- Online resources designed to help instructors plan and teach their courses (www.routledge.com/9780415315746).

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A Guide for Students of the Social and Behavioral Sciences

Seventh Edition

Jose L. Galvan and Melisa C. Galvan



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This book was designed to provide students with practical guidelines for the complex process of writing literature reviews in the social and behavioral sciences.

When Writing Literature Reviews was first published in 1999, university libraries had just begun to adopt digital search tools to assist with surveying the available research literature, but at the time most journals were still available only in print form. Today, by contrast, the contemporary university library is almost entirely digital, and this edition of Writing Literature Reviews has been recast to reflect this new digital landscape.

The author's daughter, now a university professor herself and a new co-author of *Writing Literature Reviews*, is a product of the modern digital library, and she has lent her expertise with digital databases and her recent experience in completing a doctoral dissertation to reframe the book's content. The result is a thorough rewriting and updating of the book, starting with the steps involved in searching databases, keeping track of citations, organizing the details gleaned from the literature surveyed, and producing a reference list or bibliography, all of which were rewritten to reflect the modern library's digital landscapes.

The seventh edition of Writing Literature Reviews maintains its primary focus on reviewing original research published in academic journals and on its relationship to theoretical literature. However, most of the guidelines presented here can also be applied to reviews of other kinds of source materials, and feedback received from readers in other fields suggests that the guidelines presented here can easily be applied across the curriculum. In fact, our book has been adopted for use in a variety of departments representing nearly 100 universities across the U.S., and a Chinese translation was published in 2012 for use in universities in Taiwan and mainland China.

Audiences

There are three main audiences for Writing Literature Reviews.

First, this book was written for students who are asked to write literature reviews as term papers in content-area classes in the social and behavioral sciences. Often, their previous training has not prepared them for the complex task of reviewing existing research reports to produce a cohesive essay with an original point of view. Lower-division college students need guidance in learning to search databases for reports of original research and related theoretical literature, to analyze these particular types of literature, and to synthesize them into cohesive narratives. In high school, they may have relied on secondary sources such as encyclopedias, reports in the mass media, and books that synthesize the work of others. Now, they need to access the original research reports, and they need to learn the conventions for writing academic papers. This book is designed to fill these gaps by giving students detailed, step-by-step guidance on how to conduct a literature search and how to write comprehensive reviews of primary source materials.

Students beginning to work on their theses and dissertations will also benefit from this book if they have not previously received comprehensive instruction on how to prepare critical analyses of published research and the theories on which it is based. Undertaking a thesis or dissertation is stressful. This book serves as a source of calm and logic as students begin to prepare their literature review chapter.

Finally, individuals preparing to write literature reviews for possible publication in journals as well as those who need to include literature reviews in grant proposals will find that this book can serve as a resource in outlining and identifying the key components for such publications.

Unique Features

The following features make Writing Literature Reviews unique among textbooks designed to teach analytical writing:

- Its organization follows a systematic, natural progression of steps that writing instructors refer to as the Writing Process.
- Its focus is on writing critical reviews of original research.
- It is fundamentally based in the new digital environment that defines the new twenty-first-century university library.
- The steps and guidelines are organized sequentially and are illustrated with examples from a wide range of academic journals.
- Each chapter is designed to help students develop a set of specific products that will contribute to a competent literature review.

New to This Edition

Readers who are familiar with previous editions of *Writing Literature Reviews* will find a number of new and important additions in this one, including the following:

- This new edition was rewritten and recast to reflect the tools of the modern digital library. When this book was written initially, researchers relied almost exclusively on print materials located in the university library's "stacks." Nowadays, when asked, students look puzzled when we mention the stacks. Their library work in the modern era is done entirely online, either from home or from a computer terminal on campus. This has required us to reframe large sections of *Writing Literature Reviews* to reflect this heavy reliance on digital databases and digital repositories of journal articles.
- This edition has benefitted by the addition of a new co-author with specific expertise in today's digital library research tools.
- The book's chapters have been organized into parts aimed at helping students break down the larger holistic *review of literature* exercise into a series of smaller steps. These smaller steps enable students to move easily through the multistep writing process within the time constraints of a single semester course.
- A new Chapter 2 provides step-by-step guidance for navigating the new digital tools that are now standard components of research libraries.
- A comprehensive reorganization of chapter content throughout the book incorporates feedback from longtime adopters of the book and their students.
- We have added comprehensive discussions of new available digital tools, including bibliographic software and plagiarism detection software.
- New chapter activities were added to reflect the updated content of the reframed chapters.
- Several new model literature reviews complement existing reviews that our longtime adopters have found useful. These can serve as the basis for classroom discussions and as source material for end-of-chapter activities, as needed.

Ancillaries

A password-protected instructor teaching site (www.routledge.com/9780415315746) features resources that have been designed to help instructors plan and teach their courses. These resources include PowerPoint presentations that instructors may use to present the book's key points in a lecture format and notecards with key terms and definitions.

Notes to the Instructor

Many colleges and universities have adopted "writing across the curriculum" programs, in which students are required to write papers in all courses. While the goals of such programs are admirable, many instructors are pressed for time to cover just the traditional content of their courses, leaving them with little time to teach writing. Such instructors will find this book useful because the explicit steps in the writing process are illustrated with examples throughout, making it possible for students to use it largely on their own. In addition, many professors "naturally" write well but have given little thought to—and have no training in—how to teach writing. As a supplement, this book solves that dilemma by providing a detailed guide to the writing process.

Much of what most of us know about writing was learned through what Kamhi-Stein (1997) calls the "one-shot writing assignment" (p. 52).² This is where the instructor gives an assignment at the beginning of the term, using the prompt, "Write a paper about *specific topic*." Conceptually, we tend to view this type of assignment as a single task, even though students may need to go through several discrete and complex steps to complete it. In fact, when one is writing papers that involve library research, the quality of the finished product depends in large measure on the care with which one undertakes each of these steps.

The activities at the end of each chapter guide students through these various steps of the writing process. These activities can be recast as a series of tasks that can easily be incorporated into the syllabus of a survey course in a specific discipline as a multistep writing assignment. Thus, this book has two complementary audiences: (a) instructors who may want to incorporate this multistep writing approach into their course syllabus and (b) students, working independently, who may need help in planning and implementing the various stages involved in completing a major writing assignment, such as the literature review chapter of a thesis or dissertation.

Special Acknowledgment

Both authors are indebted to the founder of Pyrczak Publishing, Dr. Fred Pyrczak, for suggesting the topic for this book. Dr. Pyrczak was a friend and mentor to both co-authors, and we are grateful for his support throughout the earlier versions of the manuscript. Melisa spent her summers as a high school and college student learning the academic publishing trade from Fred, and her academic trajectory has undoubtedly been shaped by his support. From technology assistant, to copy editor, to now professor and co-author, her professional trajectory speaks to the ways in which Fred's support has shaped her career in academia.

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In addition, we are indebted to our colleagues on the faculty of California State University, Los Angeles, and California State University, Northridge, especially Dr. Marguerite Ann Snow and Dr. Lia D. Kamhi-Stein, whose work on the multistep writing approach inspired this book's organization. Both of these individuals offered countless helpful suggestions, most of which are now part of the final manuscript.

We would also like to thank the following colleagues from a diverse range of institutions who provided feedback on the sixth edition of *Writing Literature Reviews*: Elizabeth F. Warren, Capella University; Michelle R. Cox, Azusa Pacific University; Nancy H. Barry, Auburn University, and Phyllis Burger, Concordia University St. Paul. The authors would also like to thank Dr. Matthew Giblin of the University of Southern Illinois, Carbondale for his helpful editorial comments.

Errors and omissions, of course, remain our responsibility.

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Notes

- 1 Galvan, Jose L. (2012). Writing literature reviews: A guide for students of the social and behavioral sciences. Complex Chinese Edition. Taipei, Taiwan: Psychological Publishing Co.
- 2 Kamhi-Stein, L. D. (1997). Redesigning the writing assignment in general education courses. *College ESL*, 7, 49–61.



PART I

Managing the Literature Search



Writing Reviews of Academic Literature: An Overview

This book is a guide to the specialized requirements of writing a literature review for the social and behavioral sciences. In using this book, you will learn how to write a review of the literature using primary (original) sources of information. Five different types of sources are discussed here. By far, the most common primary sources are (1) reports of empirical research published in academic journals. The first sub-heading in the section that follows refers to this type of source. It is followed by brief descriptions of four other types of material found in journals: (2) theoretical articles, (3) literature review articles, (4) anecdotal reports, and (5) reports on professional practices and standards. The second major section of this chapter consists of an overview of the writing process that you will use as you prepare your review, and it mirrors the organization of the book into its four main parts.

An Introduction to Reviewing Primary Sources

Empirical Research Reports

The focus of this book is on *original* reports of research found in academic journals. We say they are original because they are the first published accounts of particular sets of research findings. As such, they are considered *primary sources* of information, detailing the methodology used in the research and in-depth descriptions and discussions of the findings. In contrast, research summaries reported in textbooks, popular magazines, and newspapers, as well as on television and radio, are usually *secondary sources*, which typically provide only global descriptions of results with few details of the methodology used to obtain them. Furthermore, secondary sources are often incomplete, sometimes inaccurate, and their purpose tends to be more to garner casual readers' interest than to engage scholars' consideration and scrutiny. As scholars, you will want to emphasize primary sources when you review the literature on a particular topic. In fact, your instructor may require you to cite primary sources exclusively in your written reviews of literature.

Journals in the social and behavioral sciences abound with original reports of empirical research. The term *empirical* refers to *observation*, while the term *empirical* research refers to *systematic observation*. Research is systematic when researchers plan whom to observe, what characteristics to observe, how to observe, and so on. While empirical research is the foundation of any science, one could reasonably argue that all empirical research is inherently flawed. Hence, the results obtained through research should be interpreted with caution. For instance, the following is a list of three major issues that arise in almost all empirical studies and the problems they pose for reviewers of research.

Issue 1: Sampling. Most researchers study only a sample of individuals and infer that the results apply to some larger group (often called the *population*). Furthermore, most researchers use samples with some kind of bias that makes them unrepresentative of the population of interest. For instance, suppose a professor conducted research using only students in his or her introductory psychology class, or suppose a researcher mailed a questionnaire and obtained only a 40 percent return from recipients. Clearly, these samples may or may not be representative of the population of interest. In the first instance, the professor may be interested only in describing the behaviors of students in his class; but if his interest is in generalizing to a wider population the limitations of his population need to be noted.

Problem: A reviewer needs to consider the possibility of errors in sampling when interpreting the results of a study. Deciding how much trust to put in the results of a study based on a flawed sample is a highly subjective judgment.

Issue 2: Measurement. Almost all measures in empirical research should be presumed to be flawed to some extent. For instance, suppose a researcher uses a self-report questionnaire to measure the incidence of marijuana use on a campus. Even if respondents are assured that their responses are confidential and anonymous, some might not want to reveal their illegal behavior. On the other hand, others might be tempted to brag about doing something illegal even if they seldom or never do it. So what are the alternatives? One may conduct personal interviews, but this measurement technique also calls for revelation of an illegal activity. Another alternative is covert observation, but this technique might be unethical. On the other hand, if the observation is not covert, participants might change their behavior because they know they are being observed. As you can see, there is no perfect solution.

Problem: A reviewer needs to consider the possibility of measurement error. Ask yourself whether the method of measurement seems sound. Did the researcher use more than one method of measurement? If so, do the various methods yield consistent results?

■ Issue 3: Problem identification. Researchers usually examine only part of a problem—often just a very small part. Here is an example: Suppose a researcher wants to study the use of rewards in the classroom and their effect on creativity. This sounds manageable as a research problem until one considers that there are many kinds of rewards—many kinds and levels of praise, many types of prized objects that might be given, and so on. Another issue is that there are many different ways in which creativity can be expressed. For instance, creativity is expressed differently in the visual arts, in dance, and in music. Creativity can be expressed in the physical sciences, in oral expression, in written communication, and so on. No researcher has the resources to examine all of these forms. Instead, he or she will probably have to select only one or two types of rewards and only one or two manifestations of creativity and examine them in a limited number of classrooms.

Problem: A reviewer needs to synthesize the various research reports on narrowly defined problems in a given area, looking for consistencies and discrepancies from report to report while keeping in mind that each researcher defined his or her problem in a somewhat different way. Because empirical research provides only approximations and degrees of evidence on research problems that are necessarily limited in scope, creating a synthesis is like trying to put together a jigsaw puzzle for which most of the pieces are missing and with many of its available pieces not fully formed.

Considering the three issues presented, you might be tempted to conclude that reviewing original reports of empirical research is difficult. Undoubtedly, it sometimes is. However, if you pick a topic of interest to you and thoroughly read the research on that topic, you will soon become immersed in a fascinating project. On the vast majority of topics in the social and behavioral sciences, there are at least minor disagreements about the interpretation of the available research data, and often there are major disagreements. Hence, you may soon find yourself acting like a juror, deliberating about which researchers have the most cohesive and logical arguments, which have the strongest evidence, and so on. This can be a difficult, but interesting, activity.

You also might incorrectly conclude that only students who have intensively studied research methods and statistics can make sense of original research reports. While such a background is very helpful, this book was written with the assumption that any intelligent, careful reader can make sense of a body of empirical research if he or she reads extensively on the topic selected for review. Authors of reports of original research do not present statistics in isolation. Instead, they usually provide discussions of previous research on their topic, definitions of basic concepts, descriptions of relevant theories, their reasons for approaching their research in the way they did, and interpretations of the results that are moderated

by acknowledgments of the limitations of their methodology. Thus, a skilled author of a report on original empirical research will guide you through the material and make it comprehensible to you even if you do not understand all the jargon and statistics included in the research report.

One final consideration: It is essential that you carefully and thoroughly read all the research articles that you cite in your literature review. Reading only the brief abstracts (summaries) at the beginning of research articles may mislead you because of their lack of detail and, therefore, cause you to mislead the readers of your literature review. Thus, it is your ethical responsibility to read each cited reference in its entirety.

Theoretical Articles

Not every journal article is a report of original research. For instance, some articles are written for the explicit purpose of critiquing an existing theory or to propose a new one. Remember, a *theory* is a general explanation of why variables work together, how they are related to each other, and especially how they influence each other. As a unified set of constructs, a theory helps to explain how seemingly unrelated empirical observations tie together and make sense. Here is a brief example:

Consider the *relational theory of loneliness*.¹ Among other things, this theory distinguishes between *emotional loneliness* (utter loneliness created by the lack of a close emotional attachment to another person) and *social loneliness* (feelings of isolation and loneliness created by the absence of a close social network). This theory has important implications for many areas of social and behavioral research. For instance, this theory predicts that someone who is in bereavement due to the death of a spouse with whom he or she had a close *emotional* attachment will experience utter loneliness that cannot be moderated through *social* support.

Notice two things about the example given above. First, the prediction based on the theory runs counter to the commonsense notion that those who are lonely due to the loss of a significant other will feel less lonely with the social support of family and friends. The theory suggests that this notion is only partially true at best. Specifically, it suggests that family and friends will be able to lessen *social loneliness* but be ineffective in lessening the more deeply felt and potentially devastating *emotional loneliness*. Note that it is not uncommon for a theory to lead to predictions that run counter to common sense. In fact, this is a hallmark of theories that make important contributions to understanding human affairs and our physical world.

Second, the relational theory of loneliness can be tested with empirical research. A researcher can study those who have lost significant others, asking them about

how lonely they feel and the types and strength of social support they receive. To be useful, a theory must be testable with empirical methods, which helps the scientific community to determine the extent of its validity.

Your job in reviewing literature will be made easier if you identify the major theories that apply to your topic of interest. Writers of empirical research reports often identify underlying theories and discuss whether their results are consistent with them. Following up on the leads they give you in their references to the theoretical literature will provide you with a framework for thinking about the bits and pieces of evidence you find in various reports about specific and often quite narrow research projects that are published in academic journals. In fact, you might choose to build your literature review around one or more theories. In other words, a topic for a literature review might be to review the research relating to a theory.

It is important to note that a literature review that contributes to a better understanding of one or more theories has the potential to make an important contribution to the writer's field because theories often have broad implications for many areas of concern in human affairs.

Literature Review Articles

Journals often carry literature review articles,² that is, articles that review the literature on specific topics—much like the literature review that you will write while using this book. Most journals that publish review articles set high standards for accepting such articles. Not only must they be well-written analytical narratives that bring readers up-to-date on what is known about a given topic, they must also provide fresh insights that advance knowledge. These insights may take many forms, including (a) resolving conflicts among studies that previously seemed to contradict each other, (b) identifying new ways to interpret research results on a topic, and (c) laying out a path for future research that has the potential to advance the field significantly. As a result, going through the process of preparing a literature review is not an easy way to get published in a journal. In fact, when you begin reviewing the literature on a topic, there is no guarantee that you will arrive at the level of insight required to pass the scrutiny of a journal's editorial board. However, if you follow the guidelines outlined in this book, which emphasize, first, analyzing (i.e., casting a critical eye on it; pulling it apart, sometimes into pieces) and, then, synthesizing (i.e., putting the pieces back together in a new form) literature, you stand a better chance than the average academic writer of producing a review suitable for publication.

It is worth noting that sometimes students are discouraged when they find that their topic has recently been reviewed in an academic journal. They may believe that if the topic was already reviewed, they should select a different topic. That is not necessarily a wise decision. Instead, these students should feel fortunate to have the advantage of considering someone else's labor and insights, that is, of having

someone on whose work they can build or with whom they can agree or disagree. Writing is an individual process, so two individuals reviewing the same body of literature are likely to produce distinctly different but, potentially, equally worthy interpretations and reviews.³

Anecdotal Reports

As you review the literature on a specific topic, you may encounter articles built on anecdotal accounts of personal experiences. An anecdote is a description of an experience that happened to be noticed (as opposed to an observation based on research, in which there was considerable planning regarding whom and what to observe as well as when to observe a particular phenomenon in order to gather the best information). Anecdotal accounts are most common in journals aimed at practicing professionals such as clinical psychologists, social workers, and teachers. For instance, a teacher might write a journal article describing his or her experiences with a severely underachieving student who bloomed academically while in that teacher's classroom. Other teachers may find this interesting and worth reading as a source of potential ideas. But as a contribution to science, such anecdotes are seriously deficient. Without control and comparison, we do not know to what extent this teacher has contributed to the student's progress, if at all. Perhaps the student would have bloomed without the teacher's efforts because of improved conditions at home or because of a drug for hyperactivity prescribed by a physician without the teacher's knowledge. Given these limitations, anecdotal reports should be used very sparingly in literature reviews, and when they are cited, they should be clearly labeled as anecdotal.

Reports on Professional Practices and Standards

Some journals aimed at practicing professionals publish reports on practices and standards, such as newly adopted curriculum standards for mathematics instruction in a state or proposed legislation to allow clinical psychologists to prescribe drugs. When issues such as these are relevant to a topic being reviewed, they may merit discussion in a literature review.

The Writing Process

Now that we have considered the major types of materials you will be reviewing (i.e., reports of empirical research, theoretical articles, literature review articles, articles based on anecdotal evidence, and reports on professional practices and standards), we will briefly consider the process you will follow in this book and describe its organization.

The first consideration in planning to write a literature review is to recognize your reasons for writing the literature review as well as to acknowledge who your readers will be. This can range from writing a term paper for a class, to the literature review chapter of a doctoral dissertation, or even the literature review section of a journal article. These will be important considerations in deciding both the depth of your search for primary materials and the style of your review, sometimes referred to as the writer's voice. Also, an important but often overlooked distinction is made in this book between conducting a literature review (i.e., locating literature, reading it, and mentally analyzing it) and writing a literature review (i.e., deciding what you want to say to your readers about the literature and organizing it into a coherent narrative essay). In other words, writing a literature review involves a series of steps. In the field of composition and rhetoric, these steps collectively are referred to as the writing process. They include (a) managing the search for primary sources, (b) analyzing the information in those sources that is relevant to your area of interest, (c) synthesizing and organizing the information to address a specific topic on which you will focus and, then, producing the first draft of the review, and finally, (d) editing and preparing the final draft of the review. The process is much like the one you may have followed in your freshman English class when you were asked to write an analytical essay. We will begin with the first step, which is to recognize why you are writing the literature review and for whom.

Finding Your 'Writer's Voice': Writing for a Specific Purpose

Reviews of empirical research can serve several purposes. They can constitute the essence of a research paper in a class, which can vary in length and complexity depending on the professor's criteria. In a research report in a journal, the literature review is often brief and to the point, usually focusing on providing the rationale for specific research questions or hypotheses explored in the research. In contrast, the literature review in a thesis or dissertation is usually meant to establish that the writer has a thorough command of the literature on the topic being studied, typically resulting in a relatively long literature review. Obviously, these different purposes will result in literature reviews that vary in length and style. Consider the differences in the following types of literature reviews, each of which has a unique and specific purpose.

Although the guidelines given in the chapters that follow in this book can apply to any literature review, you will want to vary your approach to the writing task in accordance to your purpose for writing a review.

Writing a Literature Review as a Term Paper for a Class

Writing a literature review as a term paper assignment for a class can be somewhat frustrating because the task involves (a) selecting a topic in a field that may be new to you, (b) identifying and locating an appropriate number of research articles using databases that you may not be familiar with, and (c) writing and editing a well-developed essay, all in about three to four months. To compound matters, most