

Writing a Literature Review in Psychology

What is a literature review?

How is a literature review different from a research article?

The two purposes: describe/compare and evaluate

Getting started

Select a topic and gather articles

Choose a current, well-studied, specific topic

Search the research literature

Read the articles

Write the literature review

Structure

How to proceed: describe, compare, evaluate

Tips

Conclusion

WHAT IS A LITERATURE REVIEW?

Literature reviews survey research on a particular area or topic in psychology. Their main purpose is to knit together theories and results from multiple studies to give an overview of a field of research.

How is a Literature Review Different from a Research Article?

Research articles:

- are empirical articles that describe one or several related studies on a specific, quantitative, testable research question
- are typically organized into four text sections: Introduction, Methods, Results, Discussion

The Introduction of a *research article* includes a condensed literature review. Its purpose is to describe what is known about the area of study, with the goal of giving the context and rationale for the study itself.

Published literature reviews are called *review articles*. Review articles emphasize interpretation. By surveying the key studies done in a certain research area, a review article interprets how each line of research supports or fails to support a theory. Unlike a research article, which is quite specific, a review article tells a more general story of an area of research by describing, comparing, and evaluating the key theories and main evidence in that area.

The Two Purposes of a Literature Review

Your review has two purposes: (1) to **describe and compare** studies in a specific area of research and (2) to **evaluate** those studies. Both purposes are vital: a thorough summary and comparison of the current research is necessary before you can build a strong evaluative argument about the theories tested.

Getting Started

- (1) Select a research topic and identify relevant articles.
- (2) Read the articles until you understand what about them is relevant to your review.
- (3) Digest the articles: Understand the main points well enough to talk about them.
- (4) Write the review, keeping in mind your two purposes: to describe and compare, and to evaluate.

SELECT A TOPIC AND COLLECT ARTICLES

Choose a Current, Well-Studied, Specific Topic

Pick a topic that interests you. If you're interested in a subject, you're likely to already know something about it. Your interest will help you to choose meaningful articles, making your paper more fun both to write and to read.

The topic should be both current and well studied. Your goal is to describe and evaluate *recent* findings in a specific area of research, so pick a topic that you find in current research journals. Recent issues of APA journals can provide

inspiration. Find an area that is well defined and well studied, meaning that several research groups are studying the topic and have approached it from different perspectives. If all the articles you find are from the same research group (i.e., the same authors), broaden your topic or use more general search terms.

You may need to narrow your topic. The subject of a short literature review must be specific enough, yet have sufficient literature on the subject, for you to cover it in depth. A broad topic will yield thousands of articles, which is impossible to survey meaningfully. If you are drowning in articles, or each article you find seems to be about a completely different aspect of the subject, narrow your topic. Choose one article that interests to you and focus on the specific question investigated. For example, a search for 'teenage alcohol use' will flood you with articles, but searching for 'teenage alcohol use and criminal behavior' will yield both fewer and more focused articles.

You may need to broaden your topic. You need enough articles on your topic for a thorough review of the research. If you're unable to find much literature on your topic, or if you find articles you want that are not easy to find online, broaden your topic. What's a more general way to ask your question of interest? For example, if you're having a hard time finding articles on 'discrimination against Asian-American women in STEM fields,' broaden your topic (e.g., 'academic discrimination against Asian-American women' or 'discrimination against women in STEM.')

Consider several topics, and keep an open mind. Don't fall in love with a topic before you find how much research has been done in that area. By exploring different topics, you may discover something that is newly exciting to you!

Search the Research Literature

Do a preliminary search. Use online databases (e.g., PsycInfo, Social Sciences Citation Index (SSCI), Medline) to search the research literature. If you don't know how to search online databases, ask your instructor or reference librarian. Reference librarians are invaluable!

Search for helpful articles. Find one or more pivotal articles that can be a foundation for your paper. A pivotal article may be exceptionally well written, contain particularly valuable citations, or clarify relationships between different but related lines of research. Two sources of such articles in psychology are:

- *Psychological Bulletin*
- *Current Directions in Psychological Science* (published by the American Psychological Society) has general, short articles written by scientists who have published a lot in their research area.

Older review articles (5-10 years old) may help you to understand the history of a research area and to find more current research in that area. To follow up on an older review article:

- Search PsycInfo for whether authors cited in an earlier article have continued to do research in the area
- Search SSCI for recent studies that have cited the authors of an earlier review

How many articles? Although published review articles may cite more than 100 articles, literature reviews for courses are often shorter because they present only highlights of a research area and are not exhaustive. A short literature review may survey 7-12 research articles and be about 10-15 pages long. For course paper guidelines, ask your instructor.

Choose representative articles, not just the first ones you find. This consideration is more important than the length of your review.

Choose readable articles. Some research areas are harder to understand than others. Scan articles in the topic areas you are considering to decide on the readability of the research in those areas.

READ THE ARTICLES

To write an effective review, you'll need a solid grasp of the relevant research. Begin by reading the article you find easiest. Read, re-read, and mentally digest it until you have a conversational understanding of the paper. You don't know what you know until you can talk about it. And if you can't talk about it, you won't be able to write about it.

Read selectively. Don't start by reading the articles from beginning to end. First, read just the Abstract to get an overview of the study.

Scan the article to identify the answers to these “Why-What-What-What” questions:

- (1) Why did they do the study? Why does it matter?
- (2) What did they do?
- (3) What did they find?
- (4) What does it mean?

The previous four questions correspond to these parts of a research article:

- (1) Introduction: the research question and hypotheses
- (2) Methods
- (3) Results
- (4) Discussion

Create a summary sheet of each article's key points. This will help you to integrate each article into your paper.

Read for depth. After you understand an article's main points, read each section in detail for to gain the necessary in-depth understanding to compare the work of different researchers.

WRITE THE LITERATURE REVIEW

Main Goal

Your goal is to evaluate a body of literature; i.e., to “identify relations, contradictions, gaps, and inconsistencies” and “suggest next steps to solve the research problem” (APA Publication Manual 2010, p. 10). Begin writing when you have decided on your story and how to organize your research to support that story.

Organization

Organize the literature review to highlight the theme that you want to emphasize – the story that you want to tell. Literature reviews tend to be organized something like this:

Introduction:

- (1) Introduce the research topic (what it is, why does it matter)
- (2) Frame the story: narrow the research topic to the studies you will discuss
- (3) Briefly outline how you have organized the review

Body:

- (1) *Headings.* Use theme headings to organize your argument (see below)
- (2) *Describe, compare, and evaluate* studies for each section of your argument under your headings
 - (a) *Describe* the relevant parts of each study and explain why it is relevant to the subtopic at hand.
 - (b) *Compare* the studies if need be, to discuss their implications (i.e., your interpretation of what the studies show and whether there are important differences or similarities)
 - (c) *Evaluate* the importance of each study or group of studies, as well as the implications for the subtopic, and where research should go from here (on the level of the subtopic)

Conclusion: Final evaluation, summation and conclusion

Headings. Use headings to identify major sections that show the organization of the paper. (Headings also help you to identify organizational problems while you're writing.) Avoid the standard headings of research articles (Introduction, Method, Results, Discussion). Use specific, conceptual headings. If you are reviewing whether facial expressions are universally understood, headings might include *Studies in Western Cultures* and *Studies in Non-Western Cultures*. Organize your argument into topics that fit under each heading (one or more per heading).

Describe. For each section or subtopic, briefly describe each article or line of research. Avoid sudden jumps between broader and narrower ideas. Keep your story in mind to help keep your thoughts connected.

Compare. For each section or topic, compare related studies, if this is relevant to your story. Comparisons may involve the research question, hypotheses, methods, data analysis, results, or conclusions. However, you don't want to compare everything. That wouldn't be a story! Which parts are relevant? What evidence supports your arguments? Identifying strengths and weaknesses of each study will help you make meaningful comparisons.

If you're having trouble synthesizing information, you probably don't understand the articles well. Reread sections you don't understand. Discuss the studies with someone: you don't know what you know until you can talk about it.

Evaluate. Descriptions/comparisons alone are not illuminating. For each section or topic, **evaluate** the studies you have reviewed based on your comparisons. Tell your reader what you conclude, and why. Evaluating research is the most subjective part of your paper. Even so, always support your claims with evidence. Evaluation requires much thought and takes on some risk, but without it, your paper is just a book report.

Final evaluation and summation. On a broader scale, relating to your main theme, tell your reader what you conclude and why. Reiterate your main claims and outline the evidence that supports them.

Conclusion. How does your evaluation change or add to current knowledge in the field? What future studies are implied by your analysis? How would such studies add to current knowledge of the topic?

Tips

Allow enough time. Don't underestimate the time required to choose the right articles. Select your topic and collect articles early. Budget half of your time for research and reading, and the other half for writing.

Don't start writing too early. You need a solid understanding of the research before you can evaluate it, and you need to evaluate the research before you can write about it. This takes more time than many novice writers realize.

Take breaks. Leave time to step away from the paper so that you'll have a fresh perspective when you return.

Revise and revise. Expect to revise multiple times. Ask others to read your paper before you write the final version.

Use specific language and concrete examples. Avoid vague references such as "this" (e.g., not "this shows", but "this result shows"). Sentences that start with "I feel" signal unsupported statements; revise or delete. Have a reason for everything you write. Make every word mean something.

Paraphrase, don't quote. Direct quotes are seldom used in scientific writing and should be avoided; paraphrase instead (APA Publication Manual, 2010).

Don't plagiarize. Plagiarism is easy to avoid if you give credit where due. Whenever you cite someone else's ideas or use their language, identify the author and year of publication. If you're not sure whether to cite, cite. Using old review articles is not plagiarism as long as you cite those papers and don't present their ideas as your own.

CONCLUSION

The purpose of a literature review is to survey, describe, compare, and evaluate research articles on a particular topic. Choose a current topic that is neither too broad nor too narrow. Find the story that you want to tell. Spend a lot of time reading and thinking before you write. Think critically about the main hypotheses, findings, and arguments in a line of research. Identify areas of agreement among different articles as well as their differences and areas for future study. Expect to revise your review many times to refine your story. A well-written literature review gives the reader a comprehensive understanding of the main findings and remaining questions brought about by research on that topic.