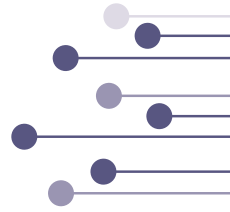


Conducting a Literature Review



Learning Objectives

After finishing this chapter, you should be able to:

- 3.1 Summarize what a literature review is, what it tells the reader, and why it is necessary.
- 3.2 Evaluate the nine basic steps taken to write a well-constructed literature review.
- 3.3 Conduct an electronic search using terms, phrases, Boolean operators, and filters.
- 3.4 Evaluate and identify the parts of an empirical research journal article, and use that knowledge to summarize a piece of research.
- 3.5 Identify and summarize the organizational approaches and writing strategy elements of MEAL that are useful when conducting a literature review.
- 3.6 Demonstrate an understanding of the ethics involved and the common pitfalls associated with writing a literature review.

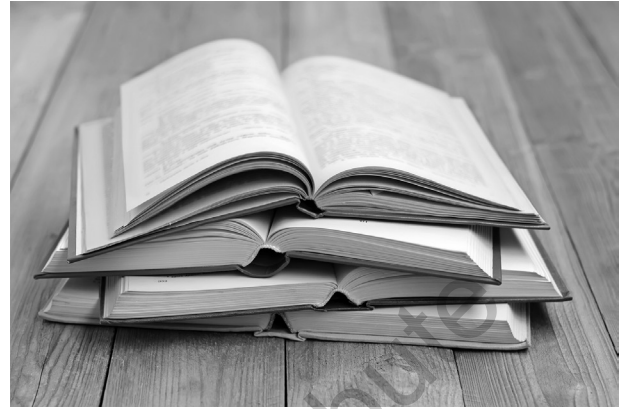
Introduction

With a research question in hand, you are ready to conduct a literature review. This chapter provides the information needed to write a quality academic literature review. Although it is widely recognized that many students fear statistics, less acknowledged is that the fear, loathing, and dread of writing a literature review is equally if not more common. This apprehension should not be surprising. As Rachel Boba Santos, one of our featured researchers, notes, “[w]riting a literature review is easy with the right skills. In general, students have not learned how to write them, but when taught skills, they can do it well.” This chapter offers those skills.

Before learning the skills needed to write a literature review, we want to acknowledge some realities about literature reviews. First, people frequently are not taught the *skills* needed to write a literature review. Writing a literature review is not instinctive, so without these skills, students are confused and stressed, and professors frequently are disappointed with the resulting work. Second, *why* you or other researchers need a literature review is rarely discussed, or when it is, it is quickly glossed over. With a full understanding about the purpose of a literature review, people are better able to accomplish them. Third, *what* a literature entails is rarely explicated. Too frequently, someone is expected to write a literature review when what is involved in constructing a literature review has not been explained to them. Fourth, clearly outlining the *steps* taken to construct a literature review is frequently incomplete or not provided at all. In short, why a literature review is needed, what a literature review is, and how to write one too frequently receive little, if any, attention in research methods texts. That is not the case in this book where we devote a full chapter to this important topic.

This chapter begins by identifying *why* a literature review is important, and it clearly describes *what* a literature is. The chapter then offers concrete *steps* taken to construct a literature review including identifying what sources are needed, how to find the sources, a systematic method to summarize and synthesize the sources, and organizational and writing strategies to produce an excellent literature review. Finally, pitfalls

commonly found in literature reviews, as well as ethical considerations in the construction of a literature review, are discussed. The chapter closes with a discussion with Sean McCandless, PhD, an expert literature review writer, about best practices, common errors, and what makes literature reviews great.



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Why Conduct a Literature Review?

A literature review is an important part of research that serves many purposes. Consider how our featured researchers responded to “Why is a literature review important?” Santos notes that “[t]he purpose of literature review is to tell the story of what is known about the topic and identify the strengths and weaknesses of that knowledge, including gaps our understanding. Gaps can be as simple as ‘while there is a good study done, it is the only study done on this topic.’” Carlos Cuevas stresses that “[a] literature review lets the world know you have a clue on what you are talking about. It also provides the means to ‘sell’ the research proposed. It offers an opportunity to make the argument as to why the research I want to do is important.” Rod Brunson contends, “A literature review situates the current study into the broader body of scholarship. It provides an understanding of related research that has been done, the populations research has focused on, and the context of prior studies. This highlights the contribution of the proposed study.” Given these valuable reasons to conduct a literature review, it is not surprising that Brunson states that, “while you can technically conduct research without conducting a literature review, you really shouldn’t. It makes no sense to do so—you may be planning on conducting a study that has been done, and this is something you could discover easily with a literature review.”

A literature review presents an understanding, or a snapshot, of the overall state of the literature by surveying, summarizing, and synthesizing existing literature about the topic of interest. A well-constructed literature review identifies major themes associated with a topic, and it demonstrates where there is agreement, and disagreement, about that topic. The review identifies limitations of prior research, and it exposes gaps in our understanding about a topic, which indicate possible directions of future inquiry on the topic. A well-constructed literature review should situate the proposed research in the context of extant literature, and it should clearly identify how the proposed research will create new knowledge that enhances the existing knowledge about the topic. If a research question is the guardrails of our research, the literature review is the pavement on which we are traveling. Understanding what we know about a topic is critical to ensuring the research—whether done as a student at the university or during your career—increases our knowledge.

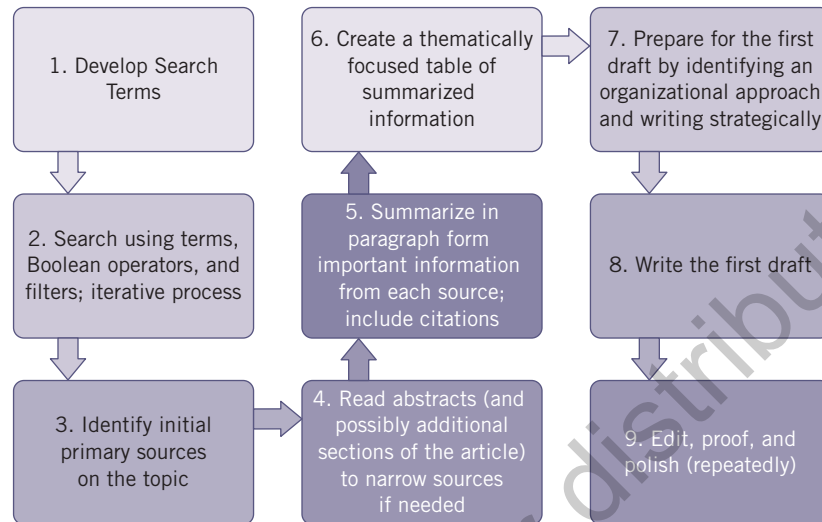
Literature reviews provide an opportunity to learn what research has to say about a selected research question and topic.



A Road Map: How to Conduct a Literature Review

This chapter describes the steps taken to conduct a literature review. Although the following sections provide detail on these steps, this initial section presents an overview, or a road map, of this process. As shown in Figure 3.1, the first step in conducting a literature review is to develop appropriate search terms using electronic search tools available in most libraries. The

Figure 3.1 Road Map for a Literature Review



Original sources: Also known as “primary sources.” They are primarily peer-reviewed journal articles. There are three basic forms of original source journal articles: peer-reviewed empirical journal articles, theoretical journal articles, and literature review journal articles.

Primary sources: Also known as “original sources.” They are primarily peer-reviewed journal articles. There are three basic forms of primary source journal articles: peer-reviewed empirical journal articles, theoretical journal articles, and literature review journal articles.

Peer-reviewed journal articles: Published articles that were rigorously peer-reviewed before being published in an academic journal. These are an excellent source of information used in a literature review.

next two steps involve using these search terms, in conjunction with Boolean operators and filters, in an iterative process to identify the initial list of primary source journal articles for use in writing the literature review. Step 4 begins the process of selecting the final set of primary sources, and steps 5 and 6 describe how to summarize and synthesize the material.

The seventh step requires identifying the preferred organizational approach and writing strategy to construct the initial rough draft. The final step includes iterative editing, proofing, and polishing until the literature review is complete.

It is not uncommon to feel intimidated when embarking on writing a literature review. Rather than viewing it as one giant, daunting task, it is easier and more accurate to view it as a series of smaller, attainable steps as illustrated in Figure 3.1. Writing an excellent literature review does take some time and requires the writer to *think about* (not just compile) the source material. Before thinking about the material, however, you must find sources that you will use to construct the review. The next section focuses on sources and where to find them.

About Sources

A literature review is constructed using information from existing legitimate sources of knowledge. Identifying which sources are appropriate when writing a literature review can be puzzling. Furthermore, knowing where the sources can be found is sometimes challenging. What to do with the sources once they are gathered is a common source of trepidation by students. What to do if the research question has already been studied is a common question as well. The next sections clarify these concerns and questions.

What Are the Best Sources?

The best sources of information for constructing an academic literature review are **original sources** or **primary sources**. These primarily come in the form of **peer-reviewed journal articles**.

A peer-reviewed journal article means the research went through a rigorous review process by multiple experts in the field prior to being published in an academic journal. The editor of that journal managed the peer-review process by sending the manuscript (generally with no author-identifying information) to at least three research experts for a review. Each of the three experts scrutinizes the manuscript, and each submits a detailed review of the research making suggestions for improvements. They also provide their assessment of whether the manuscript should be rejected (common), be revised (i.e., the revise and resubmit, aka R&R), or accepted as is for publication (rare). The editor makes the final decision about the manuscript and then informs the original researcher of the decision. If the original author receives an R&R, he or she may revise the manuscript for additional peer review using the same process. Reviews can take months or years, so it is not unusual for a research contribution to take years from beginning to being rejected or, in some cases, published. The peer-review process, while imperfect, seeks to ensure that only the highest quality research contributions are published. In the criminology and criminal justice world, there are many peer-reviewed journals in which you can find valuable empirical research. Some are

Empirical peer-reviewed journal articles: Type of original or primary source that is useful in constructing a literature review. This research is based on systematic observation and has undergone rigorous peer review prior to publication.

Empirical: Type of research based on systematic observations, experimentations, or experiences.

- | | |
|---|---|
| <i>American Journal of Criminal Justice</i> | <i>Journal of Interpersonal Violence</i> |
| <i>Crime & Delinquency</i> | <i>Journal of Quantitative Criminology</i> |
| <i>Criminal Justice and Behavior</i> | <i>Journal of Research in Crime and Delinquency</i> |
| <i>Criminal Justice Review</i> | <i>Justice Quarterly</i> |
| <i>Criminology</i> | <i>Psychology of Violence</i> |
| <i>Criminology & Public Policy</i> | <i>Punishment & Society</i> |
| <i>Feminist Criminology</i> | <i>Sexual Abuse</i> |
| <i>Homicide Studies</i> | <i>Violence Against Women</i> |
| <i>Journal of Contemporary Criminal Justice</i> | <i>Violence and Victims</i> |
| <i>Journal of Crime and Justice</i> | |

A more extensive, but still partial, list of criminal justice and criminology journals can be found on the American Society of Criminology website: <https://www.asc41.com/links/journals.html>. Although some links on this webpage are chronically broken, it is easy to search on the name of journals of interest to gain access.

There are three common types of primary source journal articles: peer-reviewed empirical research journal articles, theoretical journal articles, and literature review journal articles. In addition, local and federal governmental reports, conference papers, and information from conference presentations are useful sources. The following sections describe several of these sources.

Empirical Peer-Reviewed Journal Articles

Empirical peer-reviewed journal articles are the most commonly used type of primary source used in the construction of literature reviews. **Empirical** indicates that the research was based on systematic observations, experimentation, or experiences. Empirical journal articles are written using a predictable structure (which we describe later in this chapter) in which the author (a) identifies a research question, (b) reviews the relevant literature, (c) describes in detail the methodology used and how the data were collected and analyzed, and (d) presents findings and conclusions.

Theoretical journal articles: Type of primary or original source that is of great value in constructing an academic literature review. A theoretical journal article evaluates an existing theory, proposes revisions to an existing theory, or proposes a new theory.

Literature review journal articles: Type of original or primary source valuable for constructing a literature review. A published literature reviews, presents, organizes, and synthesizes existing understanding on a topic.

Theoretical Journal Articles

Also valuable are peer-reviewed **theoretical journal articles**. A theoretical journal article does not present research (i.e., does not pose a research question, gather evidence, analyze it, and offer conclusions), but instead, it evaluates an existing theory, proposes revisions to an existing theory, or forwards a new theory. A theory comprises, most simply, ideas that *explain* something such as offending behavior, recidivism, or victimization. Theories tie together elements or characteristics to suggest how they work together. Depending on the research topic and research question, theoretical sources are important to include in a literature review. If the proposed research seeks to test social bond theory, for example, then the literature review needs to include information about what social bond theory is and how it has been, or how it could be, used to explain the research question posed. Theoretical journal articles can be found in any peer-reviewed journal. In addition, theoretical pieces are published in specialized theoretical journals such as *Feminist Theory* (<http://fts.sagepub.com/>), which is an international peer-reviewed journal focused on academic analysis and debate within feminism. Like empirical research sources, theoretical journal articles are peer reviewed, meaning they receive the same level of scrutiny during review that an empirical research article does.

Literature Review Journal Articles

Peer-reviewed literature review articles are also excellent primary sources to use when constructing a literature review. A **literature review journal article** presents, organizes, and synthesizes existing understanding about a topic. This is exactly the purpose of the literature review section in a research manuscript. Although literature review articles may appear in any journal, they are more likely to be found in specialized journals such as *Trauma, Violence, & Abuse* (<http://tva.sagepub.com/>) and *Aggression and Violent Behavior* (<http://www.journals.elsevier.com/aggression-and-violent-behavior/>). *Trauma, Violence, & Abuse* is a peer-reviewed published quarterly and is devoted to organizing, synthesizing, and expanding knowledge on all forms of trauma, abuse, and violence.

Finding a literature review journal article, especially a contemporary one, on the topic of proposed research offers an invaluable resource for constructing one's own literature review and for understanding the state of the field. Like the other types of primary sources, literature review pieces undergo rigorous peer review and assessment by experts in the field prior to publication.

Government Research and Reports and Policy Briefs

Additional valuable sources to use when writing an academic literature review are government reports and publications and policy briefs. In the world of criminology and criminal justice, this includes reports and documents from the Department of Justice and its many offices (Bureau of Justice Statistics, the FBI, National Institute of Justice, etc.), or private organizations such as RTI, Westat, and policy centers in universities. Many of these documents can be searched for and found at the National Criminal Justice Reference Service (NCJRS; <https://www.ncjrs.gov/>). Searching using key terms or phrases will identify research that does not appear in journals but is published by governmental statistical agencies. You may also go to a particular agency's website to access additional information. For example, the FBI website offers a section on reports on crime statistics at <https://ucr.fbi.gov/>. The Bureau of Justice Statistics offers statistics and reports on a broad selection of criminal justice related topics at <http://www.bjs.gov/>. Additional information about searching on websites is provided in the next section. You should also find out about local criminal justice agencies to ascertain whether their research would be of value to a proposed research project.

Avoiding Predatory Publishers and Predatory Journals

Once upon a time, a researcher could find a peer-reviewed journal article and be assured the research was quality. Unfortunately, the proliferation of predatory publishers and predatory journals muddied that. **Predatory publishers** are illegitimate publishers that take fees from unsuspecting authors. Some characteristics of predatory publishers are that they publish multiple journals, yet the publisher's owner is identified as the editor of every one of these so-called journals. These predatory publishers tend to not have an editorial board, and no academic credentials about the editor are made available. The predatory publishers also report fabricated **impact factors** (which are an indication of the journal's quality). Generally, the mission of the journal is not in alignment with the title of the journal. Jeffrey Beall of the University of Colorado Denver, who has compiled a list of these predatory publishers, estimates that from 2011 to 2017, the number of predatory publishers grew from 11 to 1,155.¹

In addition to the predatory journals published by predatory publishers, standalone **predatory journals** are increasingly problematic. Predatory standalone journals engage in several nontraditional journal behaviors. For example, they charge authors a significant publication fee. Commonly this fee is not disclosed until the end of the process. Predatory journals frequently list real academics as members of editorial board, unbeknownst to those academics. In addition to including real academics without their permission on editorial boards, these predatory journals also include fictitious academics on the board. Like their predatory publishing counterparts, standalone predatory journals report fabricated impact factors and fabricated physical locations.

A troubling aspect of these predatory journals is that they describe themselves as peer reviewed when, in fact, they are not. As a result, articles of questionable value are published under these titles. Consider this peer-reviewed research piece, which had been submitted to the *International Journal of Advanced Computer Technology (IJACT)* in 2005. The peer reviewer's report was included along with the letter of acceptance for this work. In the peer-review report, the reviewer noted that the manuscript was "excellent." Authors Mazieres and Kohler (2005) of Stanford University must have been surprised at the acceptance of their "research" given the title and complete manuscript was one sentence repeated thousands of times: "Get me off your #ucking mailing list." The authors were asked to submit \$150 to the editor after its acceptance for publication. Beall estimates that between 2013 and 2017, predatory standalone journals increased from 126 to 1,294 (see Footnote 1 for source).

When searching for *legitimate* primary sources of information, you must ensure you are not using information from a predatory source. As noted in Footnote 1, until early 2017, one way to ascertain this is to consult a list of predatory publishers and journals created and maintained by Beall. Beall advocates the careful consideration of journals. You must first determine whether this is a trustworthy journal (versus assuming it is). The criteria described earlier offers ways to assess journals. These include asking yourself the following: Can you tell which professional organization is associated with the journal? Can you contact this organization easily if needed? Are the editorial policies and editors legitimate? Do you know any of the editors? Is actual peer review conducted (journals that publish within days of receiving a manuscript do not). Are there surprise publication fees? Is it clear how much publication



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Peer-reviewed and published quarterly, journals such as *Trauma, Violence, & Abuse*, and *Aggression and Violent Behavior* are devoted to organizing, synthesizing, and expanding knowledge on all forms of trauma, abuse, and violence.

Predatory publishers: Illegitimate publishers of predatory journals. In general, elements of the publisher are fabricated (e.g., impact factor scores, editorial boards, journal holdings, peer-review, location of offices and office holders). Predatory publishers are not a source of quality academic information.

Predatory journals: Illegitimate journals that are in business to take fees from unsuspecting authors. In general, elements of the journal are fabricated (e.g., impact factor scores, editorial boards, peer-review, location of offices and office holders). Information taken from predatory journals should not be used in academic literature reviews.

¹During the writing of the book, Beall suspended publication of his lists. This information has been pulled and published elsewhere, however. For instance, a copy can be found at <http://bealllist.weebly.com/>.

Impact factors: Scores assigned to journals theoretically indicating the journal's quality. The higher the score, the higher the quality.

fees are, if they exist? What is the timeline for publication? If a journal promises publication within days, avoid it. If after checking you find satisfactory answers to these questions, by all means use the article.

Only recently did the U.S. government take action against predatory publishers and journals. In 2016, the Federal Trade Commission (FTC) filed a complaint against the OMICS Groups, Inc., iMedPub, LLC, Conference Series, LLC, and Srinubabu Gedela (U.S. District Court, District of Nevada, 2016). The charges state that these organizations, under the control of their president and director Srinubabu Gedela, have deceived researchers about the predatory nature of the publisher by hiding publication fees ranging from hundreds to thousands of dollars. In addition, the charges allege that Gedela and his organizations falsely claimed the journals used rigorous peer review, had editorial boards of scholars, and advertised false impact factor scores. Researchers were pursued to submit articles, which were accepted days later. At the same time, pay was demanded. Many researchers attempted to withdraw their manuscript from consideration, realizing these publishers and journals were illegitimate. The organizations refused to allow the researchers to withdraw their work and, at times, published them. This is problematic as it is unethical for researchers to submit research to more than one journal at a time. In addition, it is unethical to publish the same research in multiple journal outlets. A researcher can't ethically walk away from predators and submit his or her research to a legitimate publisher once ensnared in their trap. Time will tell the outcome of the FTC complaint, but perhaps it will serve as a warning to predators.

Avoiding predatory sources means you are using quality literature to construct your literature review. Using these sources leads to a weak literature. If your research starts with a weak, wrong, or incomplete literature review, your entire research endeavor is compromised. Your research is only as strong as your weakest part, and you want to avoid the literature review being that weak link.

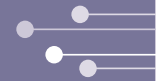
Inappropriate Sources

Predatory publishers and predatory journals are not the only inappropriate sources for use when constructing a literature review. Another inappropriate source for an academic literature review is Wikipedia. Wikipedia began in 2001 as an online encyclopedia that differed from traditional encyclopedia in that entries are written by a multitude of people. Entries can be updated or altered indefinitely (only some pages in Wikipedia are locked from editing). The open access nature of editing in Wikipedia suggests that the information found there may or may not be correct and that the information is subject to sabotage, and manipulation. In addition, Wikipedia does not report the elements of original research that is needed when writing an academic literature review such as the method, findings, and research questions. Although Wikipedia has several useful purposes, use of the information published there to write an academic research literature review is not one of them. This is not to say that Wikipedia is of no value. At times, a Wikipedia page lists primary source citations for a topic of interest. By using those citations, you can find original sources that are useful in writing a literature review. Taking what a Wikipedia page states about original sources, however, is risky as there is no guarantee that the information is accurate or legitimate.

For the same reasons, various information or summaries presented in textbooks, magazines, blogs, newspapers, other media, and nonacademic sources are not appropriate original primary sources for a literature review. These sources, at best, generally describe or summarize limited information from primary sources. These types of sources do not provide important details such as the methodology, the state of the literature, and the limitations of the research—information required in the construction of a literature review. Furthermore, it is not uncommon that these sources fail to accurately describe research and information from primary sources. Still, like a Wikipedia page, these sources may lead you to a primary source of information that would be useful in constructing a literature review.

Research in Action

Police Impersonation in the United States



Later in this chapter, we use police impersonation as an example of searching for literature while developing a research topic. Why focus on the topic of police impersonation? Media articles, although anecdotal, demonstrate that police impersonation places community members at risk for easy victimization. Police impersonation can affect the public's confidence in law enforcement, particularly if victims believe that an impersonation was a "legitimate" police action undertaken by a corrupt cop. In addition to damaging the public's trust in authority and undermining the reputation of legitimate police officers, impersonators may threaten officers' ability to do their work effectively.

To conduct this exploratory research, Rennison and Dodge (2012) were guided by three purposes:

1. Exploring police impersonation incident characteristics
2. Comparing police impersonation incident characteristics with national violent crime statistics
3. Identifying common themes found among impersonation events

To address these research questions, the researchers gathered 56 police case files originating from three metropolitan areas in the United States. To gather the data, the researchers relied on personal connections within agencies that expressed a willingness to provide data. Participating agencies were assured that identifying information about the departments and incidents would remain confidential. The impersonation events occurred from May 2002 to February 2010. The 56 incident files provide information on 63 offenders and 71 victims. A total of 45 case files were used in the qualitative analysis and include the initial police report complete with details about the incident, suspect(s), and victim(s).

To analyze the data, multiple approaches were used. First, the incident, offender, and victim characteristics

were described using descriptive statistics. Second, these impersonation statistics are compared with statistics based on overall violent crimes (i.e., attempted and completed rape/sexual assault, robbery, aggravated assault, and simple assault) from 2002 to 2009 NCVS data restricted to crimes reported to the police only. Third, the 45 case narratives are aggregated and analyzed for major themes and content phrases. These qualitative data were first analyzed for general statements among categories of analogous events and then grouped into conceptual domains. Selected quotes representative of the major themes are presented as examples. The objective of the qualitative analysis is to provide a descriptive, in-depth narrative that assists in establishing a framework for future inductive, grounded theory development.

With regard to the first research purpose, the findings showed police impersonation incidents most often involve one victim, one offender, no witnesses, no weapon, and no injury to the victim. Although impersonation incidents occur most commonly on a highway/roadway/alley, about one fifth take place in/near the residence/home of the victim. Most of the 63 police impersonators in the sample were male, White non-Hispanic, and 31 years of age. Of the 71 victims of police impersonation, the findings show that victims are about equally split between males and females, about equally split between Hispanics and non-Hispanics, primarily White, strangers to the offenders, and about 31 years of age.

To address the second research question, comparisons were made with overall reported violence in the United States. The findings show that police impersonation incidents are more likely to involve one offender, be committed with no witnesses, and be less likely to involve an injured victim than overall violence. Impersonation events were equally likely to involve an armed offender as overall violent victimizations. Police impersonators are far more likely to be White and older than are general violent offenders from incidents reported to the police. Although overall violence and impersonation victims are similar in many ways, a major difference

(Continued)

(Continued)

was found when comparing the Hispanic origin of impersonation victims with overall violent crime victims. About half of all impersonation victims are Hispanic, compared with only about one in ten of overall reported violent crime victims.

The qualitative content analysis focused on the third research question that police impersonators are engaging in three primary activities: vehicle pull-overs, knock and talks, and harassment. The most typical impersonator incident involves an offender driving an unmarked car who uses a spotlight or red and blue flashing lights for a pull-over. A total of 13% of the cases involved knock and talk impersonations. The cases generally are motivated by attempts to gain entrance into a home for a variety of reasons. In about three in ten cases, the impersonators are seeking information or engaging in harassment. In these cases, the impersonators call the victim, identify themselves as an officer or a detective, and give a fake badge number to gain information. One collection agent, for example, claimed to be a detective and threatened to arrest the victim, who was behind on her car payments.

What sort of policy implications come from this work? First, the findings indicate that police impersonators may

be easily deterred. In vehicle pull-over cases, most impersonators fled when the targeted victim was on the phone with 911 verifying the legitimacy of the stop. Additionally, potential victims who questioned the legitimacy of the stop and challenged the fake officer tended to avoid further victimization. Second, the findings indicated the need to better educate the public (as well as officers) that the practice of confirming that they are being pulled over by a legitimate officer is a reasonable action. Third, the role of fear of terrorism and out-groups or vulnerable populations in the public plays into the hands of impersonators. Particularly interesting are the disproportionate number of Hispanics victims in the sample. These findings are similar to existing historical research on impersonation against a vulnerable population. Previous research shows that in general Hispanics are less likely to contact the police compared with non-Hispanic Whites. The findings indicate that, in some areas at least, Hispanics are being targeted.

Rennison, C. M., & Dodge, M. J. (2012). Police impersonation: Pretenses and predators. *American Journal of Criminal Justice*, 37, 505–522.

Finding Primary or Original Sources

With an understanding about what is and is not an appropriate source of information, the next step in writing a literature review is to find the original sources. The best way to go about finding primary or original sources is using electronic search tools available at most libraries. With advances in technology, most anyone can access a library with excellent search capabilities whether in person or online. Given variability in tools available in libraries, it is not possible to describe the steps in accessing sources for every library. Therefore, it is strongly recommended that you get a tour of your library, including how to access and operate electronic search tools. In general, librarians are happy to demonstrate how to use their electronic search tools to conduct research. What follows are general steps taken to find these sources.

Develop Search Terms

1. Develop Search Terms

The first step in searching for primary sources is to identify some search terms. After spending considerable time in the previous chapter developing a research topic and research question, deciding on search terms should be easy: They are the topic of research. By way of example, let's consider a real example encountered when conducting research on police impersonation. The topic of the research is "police impersonation," which suggests that a reasonable starting point is to use two search terms in the initial search: *police* and *impersonation*. Conducting this search requires accessing the library's online search tool. The library's home page

offers a place to input terms for a search. Typing in the two terms *police* and *impersonation* results in 58,427 sources. Reading or even skimming this many sources is unreasonable; therefore, you need a more refined or limited search. This initial search highlights an important strategy when searching for sources: Start with the narrowest search possible. Clearly a narrower search is needed in this example. Aside from using different terms, there are tools available that can assist.

Search Using Boolean Operators and Filters

2. Search using terms, Boolean operators, and filters; iterative process

There are two useful tools available to narrow (or broaden if needed) a search. The first tool involves Boolean operators, and the second involves filters. **Boolean operators** are used to connect or to exclude particular search terms or phrases. A **term** refers to a single word, whereas a **phrase** refers to a series of terms. For example, *police* and *impersonation* are terms, whereas “police impersonation” is a phrase. To identify a phrase, use quotation marks around the terms.

There are three frequently used Boolean operators: “and,” “or,” and “not.” Using “and” to separate terms in a search will produce results for sources in which all of the search terms (*police*, *impersonation*) are present. In many search engines, the word “and” is implied when you enter terms. In other words, searching on “police and impersonation” is the same as searching on “police impersonation.” Use the Boolean operator “or” to generate results containing at least one of the search terms or phrases. You would use the Boolean operator “not” when you do not want the results to contain the specified term.

Table 3.1 presents an assortment of searches for police impersonation sources using a variety of terms, phrases, Boolean operators, and quotation marks. Results shown in Table 3.1 make clear the importance of wisely choosing the Boolean operators and quotation marks. The results also demonstrate the iterative nature of searching for sources.

In the examples shown in Table 3.1, the searches did not deviate from using the terms *police* and *impersonation*. What did vary was the use of Boolean operators. It is important to keep an open mind about search terms. This raises a second important strategy, which is to use other related phrases or terms to generate additional potential sources. For example, and as shown in Table 3.2, when searching using the phrase “impersonation of police,” 118 results for sources are identified. Not surprisingly, removing the quotations and searching on the three terms *impersonation of police* results in 58,426 results—an unwieldy and unworkable number.

Another tip in conducting a search is to consider literature in other fields. Just because an existing piece of research is not found in a criminal justice or criminology journal does not mean it is not useful. As Brunson notes, “searching for studies across disciplines can lead to useful research results. Do not be overly rigid in a search.” In addition, if you are interested in a theoretical article or a review on a topic, include the term “theory” or “review” in the search. Searching is an iterative process so do not expect to search once and be finished. The goal is to find a workable number of relevant sources that represents the topic of interest. This takes some time and multiple attempts.

The second useful tool used to narrow an electronic search are filters. **Filters** place restrictions on the search. A search engine may not use the term *filter*, so look for a filtering process identified as “refine your search” or similar language. In general, there are many filters or refinements that can be made to a search. You can restrict the search in terms of type of media (journals, books, etc.), publication date, discipline (e.g., film, history, literature, etc.), language, and others. Most useful are filters for the type of source and dates of publication. Recall that an academic literature review should include primary sources, including empirical peer-reviewed journal articles, theoretical pieces, and literature reviews published as journal

Boolean operators: Connect or exclude particular search terms or phrases used in an electronic search. Use of Boolean operators enables the searcher to narrow or broaden a search for material.

Term: Single word used in an electronic search.

Phrase: Particular series of terms or words. Phrases used in electronic searches are identified using quotation marks.

Filters: Used in electronic searches to place restrictions on or refine a search. Common filters used are on the type of source needed (e.g., journal articles) and date range of publication (e.g., last five years).

Table 3.1 Search Results: Variety of Terms, Phrases, Boolean Operators, and Quotation Marks

Search Terms/Phrases	Number of Hits	What It Searched
Police impersonation	58,427	Sources with the terms “police” and “impersonation” in them.
“police” “impersonation”	58,427	Identical to the prior search
“police impersonation”	692	Sources with the phrase “police impersonation”
Police and impersonation	58,425	Sources with the terms “police” and “impersonation” in them.
“police” and “impersonation”	58,425	Identical to the prior search
“police and impersonation”	5	Sources with the phrase “police and impersonation.”
Police or impersonation	58,340	Sources with at least the term “police” or “impersonation” in them.
“police” or “impersonation”	58,340	Identical to the prior search
“police or impersonation”	0	Sources with the phrase “police or impersonation.”

Table 3.2 Search Results: Impersonation of Police

Search Terms/Phrases	Number of Hits	What It Searched
“impersonation of police”	118	Sources with the phrase “impersonation of police.”
Impersonation of police	58,426	Sources with the terms “impersonation,” “of,” and “police.”

articles. Electronic search engines in most libraries allow you to filter the search based on the type of source and journal article. Table 3.3 shows how the search results change when the police impersonation search is restricted only to journal article sources.

A rule of thumb when gathering sources for a literature review is to focus on contemporary sources. Contemporary sources are considered to be sources published in the previous five to seven years. Most library search engines allow a person to filter using publication dates. What if the police impersonation search was restricted to journal articles no more than seven years of age? Table 3.3 presents these search results. Filtering using dates can be a valuable approach in many instances, but you must consider the purpose of their literature review when using them. In some cases, a literature review may cover the topic of interest in a chronological or historical fashion. This type of literature review would suffer from using a filter based on publication date because foundational or classic research, which is older, will be missed. In addition, if you wish to review the theoretical underpinnings of a particular topic, it would not be wise to restrict the search to contemporary work only because the classic theoretical work probably occurred decades before.

The final search of police impersonation shown in Table 3.3 identified seven sources. Are these too few sources? To make that decision, you must read the titles of the identified sources to determine whether the sources are useful for examining, describing, and

Table 3.3 Restricting Search to Journal Articles Published in Last Seven Years

Search Terms/Phrases	Number of Hits	What It Searched
Police impersonation	438	Journal articles published in the last seven years with the terms “police” and “impersonation.”
“police impersonation”	7	Journal articles published in the last seven years with the phrase “police impersonation.”

understanding police impersonation. Only two of the seven titles appear to focus on police impersonation research. Does this indicate there is little research on police impersonation, or does this indicate that a broader search is needed? To be sure, it is prudent to broaden the search.

One way to broaden this search is to focus on “impersonation,” namely, by removing the focus on “police” to ascertain if additional results appear. A search of journal article sources that focused on impersonation and that were published in the last seven years results in 3,609 results. A quick examination of these titles indicates that many of the sources focus on biometric impersonation, female impersonation, online impersonation, and visual impersonation, not on police impersonation. You can even find information about Elvis impersonators! Given this information, you may conclude that there is little research available on police impersonation, and you may proceed with relevant sources already identified. In fact, this is exactly what happened when Callie Rennison and Mary Dodge (2012) conducted a literature review on police impersonation (although at that time, the only relevant source was a somewhat related master’s thesis). It was also Dodge’s experience when she conducted a literature review for her women decoy prostitution research (Dodge, Starr-Gimeno, & Williams, 2005). There was no existing literature examining it. All Dodge could find in the literature were related pieces that provided only speculation about women’s views in these roles. As Dodge, who is also one of our featured researchers, notes that, if after searching thoroughly, you find little or no existing literature, “move forward with your research and the satisfaction that you were the first to think about the topic. This means you have a research imagination that allows you to come up with something different.” Dodge’s research was path-breaking in that way.

Saturation: Has several related meanings, one of which involves searching for sources for a literature review. In particular, it indicates the search for sources is complete because one finds no new information on a topic and the same studies and authors repeatedly are discussed.



Identify Initial Primary Sources

3. Identify initial primary sources on the topic

Using the search strategies described earlier should result in a list of initial primary sources on the topic of interest. At this point, you need to go through that list to determine which sources are irrelevant and should be discarded, and which will be used to write the literature review. The initial way to do this is to examine the title and abstract of each source.

A common question is as follows: “When do I know when to stop looking for sources?” Recall that the purpose of the review is to give a complete overview of the topic. **Saturation** is a term that has many related meanings, one of which is used by several of our highlighted researchers to indicate the search for sources is complete. Dodge states that it is time to stop searching for literature review sources when she “sees the same citations repeatedly. There is a point where it seems clear you’ve found it all—given ease of electronic data bases—you reach some type of information saturation.” Brunson also noted, “When a person comes across the same authors, and same studies cited in numerous journal articles, saturation is reached and the



Abstract: First section of a journal article that provides, in a concise paragraph of approximately 150 to 250 words, the purpose, method, findings, and conclusions of the research.



search can be concluded.” A frequent question is as follows: “How many sources does it take to accomplish that?” Santos notes, depending on the purpose of the review, “12 to 15 sources are minimum, but that it is more about the quality of the sources, not the quantity. In general, more recent research is better (last 5 years), but be aware that the first things that come up in a search is not necessarily the best research.” What kinds of sources does it take to reach saturation? Heather Zaykowski finds that a literature review is complete when she reaches a “saturation in that the search is not revealing anything drastically new. She finds this occurs often when she has a mix of the ‘classic’ studies, and those that seem to have the biggest impact on the field (oftentimes understood by the number of citations, but not necessarily so), and current research (past five years).” Zaykowski’s (2014) literature review provided a lot of relevant research but little on male victims who seek services, and little on female victims of nonsexual and nonrelational violence.

Cuevas knows it is time to stop searching for sources when he feels he has the material needed and can “make the argument for conducting the research nicely. Once there, I stop. I also ask, given the information in these sources, can I make an argument that the average person on the street can read and understand where I am going and why? If so, I have the sources needed.” This was the case for his work on Latino teen dating. Although no one had been able to do the research Cuevas and his team did (Sabina, Cuevas, & Cotignola-Pickens, 2016), there was a rich literature focused on teen dating violence to inform his work. Being able to work with a manageable amount of literature requires the strategy used by Cuevas.

Read Abstracts to Narrow the List of Sources

4. Read abstracts (and possibly additional sections of the article) to narrow sources if needed

What do you do if you have refined a search to be as narrow as possible, yet you are still presented with a large number of potential sources (e.g., 692 sources)? This requires the use of an additional strategy to narrow the list of sources: Read the abstracts of each potential source. An **abstract** provides, in one concise paragraph (e.g., 150–250 words), the purpose, method, findings, and conclusions of the research. Abstracts should be visible online using the library search software. If after consulting the abstract it is clear the article is not one that should be used, remove it from the list of those saved for the literature review. If you cannot ascertain the article’s relevance from the abstract, then consulting other parts of the complete journal article should make its value clear. The next section discusses the anatomy of an empirical journal article, which should allow for an efficient search of the article to aid in the selection of the final list of articles for the literature review.

The Anatomy of an Empirical Research Article

Those new to research frequently find it impossible to read and comprehend all of the primary sources gathered from a search. Fortunately, reading every word of every primary source is not necessary. As Dodge notes, a key to a successful literature review is “not to get caught up in the minutiae of each piece of research, especially the more sophisticated studies. You do not need to read every word of the journal article, rather, you need to see the big picture of what was done and how it relates to the proposed research.” Zaykowski offers similar advice: “It is not always important to include minute details of each study. Instead think about the broader general takeaways, and provide one or two examples to support those takeaways.”

With an understanding of the anatomy of an empirical research journal article, you can skillfully find key information about the research that will be used to (a) decide to keep or remove an article from consideration and (b) pull key information needed to write the literature review (described in a later step). Empirical research journal articles have a predictable structure. Understanding what type of information is found in each section assists in a more efficient consideration of each piece.

Journal articles begin with an abstract, which is commonly block justified so that it stands apart from the text in the journal article. The abstract provides a concise description of the research. In terms of being useful in constructing a literature review, the abstract should help you decide whether that primary source is relevant for the proposed literature review. Note the information conveyed in Dodge and colleagues' 164-word abstract describing the female police decoy research (Dodge et al., 2005). Reading Dodge's abstract is quick, easy, and gives a good idea about the topic and purpose of the research.



Abstract—Dodge et al. (2005)

Reverse police prostitution stings, which target men by using female police officers as decoy prostitutes, are becoming a common method in some United States cities for controlling the problem of solicitation for prostitution. The role of policewomen as decoys has received scant attention by scholars, though critics and traditional feminists view the practice as further evidence of the subjection and degradation of women in law enforcement. This article presents participant field observations of how reverse prostitution operations are conducted in Aurora, Colorado

Springs, and Denver, Colorado, and qualitative interview data from 25 female police officers who discuss their experiences as prostitution decoys. The findings indicate that female officers view the decoy role as an exciting opportunity for undercover work, despite the negative connotations of acting like a whore. According to the officers who work as decoys, it adds excitement and variety and offers potential for other opportunities for advancement within the police department in contrast to the mundane duties often associated with patrol. (p. 71)

A second example of an abstract is found in Cuevas and colleagues' research on Latino teen dating (Sabina et al., 2016). Note the tremendous amount of information packed into the 155-word abstract.

Abstract—Cuevas and Colleagues (Sabina et al., 2016)

This study uses data from two waves of the Dating Violence Among Latino Adolescents (DAVILA) study and focuses on the 1) rates of dating violence victimization by gender, 2) risk of experiencing dating violence victimization over time, 3) association of dating violence victimization with other forms of victimization, and 4) association of immigrant status, acculturation, and familial support with dating violence victimization over time. A total of 547 Latino adolescents, from across the USA, aged 12-18 at Wave 1 partic-

ipated in both waves of the study. Rates of dating violence were around 19% across waves. Dating violence at Wave 1 and non-dating violence victimization were associated with an elevated risk of dating violence during Wave 2. Cultural factors did not distinguish between dating violence trajectories, except for immigrant status and familial support being associated with no dating violence victimization. Overall, dating violence affects a large number of Latino teens and tends to continue over time. (p. 5)

Brunson's abstract is also clear, easy to read (Brunson & Weitzer, 2009).

Abstract—Brunson and Weitzer (2009)

Much of the research on police-citizen relations has focused on adults, not youth. Given that adolescents and particularly young males are more likely than adults to have involuntary and adversarial contacts with police officers, it is especially important to investigate their experiences with and perceptions of the police. This article examines the accounts of young Black and White males who reside

in one of three disadvantaged St. Louis, Missouri, neighborhoods—one predominantly Black, one predominantly White, and the other racially mixed. In-depth interviews were conducted with the youths, and the authors' analysis centers on the ways in which both race and neighborhood context influence young males' orientations toward the police. (p. 858)

Key words: Major concepts of greatest importance found in a journal article. They are generally found on the first page of the article.

Introduction section of a journal article: First section of the text (after the abstract) that identifies the purpose of the research and why it is important.

In some cases, an abstract does not offer enough information to allow a decision to keep or discard the source. In those situations, you should consult other parts of, or sections of, the journal article. One place to consider is the list of key words. **Key words** are generally found on the first page of the journal article, frequently following the abstract. These are words designated by the author(s) that identify the main concepts of greatest significance in the publication. Reviewing them may offer information about whether the article will be useful in the writing of a literature review. Other more formal sections of journal articles are described next.

The **introduction section of a journal article** is the first “normal” body of text (i.e., not block justified). The introduction is generally not labeled as the “introduction,” but instead usually the title of the paper appears at the top of that page. In terms of being useful in constructing a literature review, an examination of the introduction section provides information about the purpose or goal of the research, why it is important to study, and how it adds to the literature. This information should be useful in ascertaining whether the article will be useful in writing your literature review. In some cases, such as in Brunson’s research (Brunson & Weitzer, 2009), a separate introduction section was not provided. Rather, the introduction blends with the review of the literature (see the next section).

Consider this text taken from the introduction section of the Santos’ research on offender-focused police intervention (Santos & Santos, 2016). Reading just the first three paragraphs of the six paragraph introduction offers enough information about the research that you should be able to identify if this would be useful as a primary source in your proposed literature review.

Santos and Santos (2016) Introduction— Offender-Focused Police Intervention

Classical criminological research shows that a small number of offenders account for a disproportionate amount of crime (Blumstein et al., 1986). In recent years, police agencies and researchers have sought to develop data-driven methods to identify chronic offenders so that police can implement offender-focused strategies as one of the effective ways to reduce crime (Bureau of Justice Assistance, 2012; Jennings, 2006; Ratcliffe, 2008; Schaible & Sheffield, 2012; Telep & Weisburd, 2012). Simultaneously, criminologists have concluded that crime reduction strategies that focus on “place” are more effective than those that focus on people (Telep & Weisburd, 2012; Weisburd, 2015).

Nonetheless, criminology of place research consistently shows that offending is “tightly coupled” to place (Weisburd et al., 2012). Offenders commit crimes relatively close to

where they live, and the farther offenders travel from where they live, the less likely they will commit crime (Bernasco & Block, 2009; Bernasco & Nieuwebeerta, 2005; Hesseling, 1992; Rossmo, 2000). Yet, there are currently few studies that rigorously examine the effectiveness of offender-focused strategies implemented by police in crime hot spots (Groff et al., 2015).

Consequently, this study is an effort to contribute to both offender-focused and place-based research by testing a prevention-oriented, offender-focused intervention while also accounting for place. The premise tested here is that if the offender-focused intervention is implemented for multiple offenders of a particular crime type living in a long-term hot spot of that crime type, there will be a reduction of that crime in the hot spot since the offenders are likely committing some of their crimes near where they live. (pp. 373–374)

The third section in an empirical research journal article is the literature review. The purpose of the literature review is to outline the state of the knowledge related to a topic at the time the piece was published. This section of the paper, although very important, does not offer much in terms of deciding whether it should or should not be used in constructing

your literature review. Should a source be selected, however, the literature review is vital in that it describes valuable research that may inform your literature review.

The next section in an empirical research paper is the **method** section. This section outlines in detail the approach and strategies taken to answer the research question. This includes information on the source of the gathered data (e.g., sample), the approach taken to gather the data (e.g., survey, observations, and interviews), and the organizational and analytic techniques used to analyze these data. This section is of limited value for ascertaining whether the journal article is valuable for the construction of the proposed literature review unless the methodology used in the study is specifically related to your particular research question.

A **findings** section follows the method section and presents results from the data analysis. In this section, the findings and only the findings are offered. These results are used to answer the research question or questions. This section is of limited value for determining whether the source should be used to write your literature review. This section is of great value, however, if this piece is selected for your literature review.

A **discussion** section follows the findings section and places the findings into the context of the existing literature. In this section, the author discusses whether his or her results support the literature or deviate from it. The discussion generally avoids presenting statistics or findings such as themes or core meanings. Instead, it focuses on *interpreting* the findings presented. It points out limitations of the research, gaps that remain, and offers directions for future research. The findings section may be useful in determining whether this source is one that should be used to inform the proposed literature review. The discussion section definitely has important information should the source be used.

Sometimes there is a standalone **conclusions** section in a journal article. In others, it is combined with the discussion section. Conclusions sections are generally short and briefly summarize the overall conclusions of the research, including why the findings are important. In general, and to help readers better understand the key points of the article, it presents information found elsewhere in the article.

All peer-reviewed journal articles conclude with a list of **references**. In the reference section, every source cited in the body of the paper is listed with information needed to find and access that source. The references section is not useful in terms of deciding to keep or reject a primary source for use in a proposed literature review. In contrast, should you decide to use the article in constructing your literature review, the references offer valuable information about potential additional sources.

Throughout a journal article, including the reference section, the authors will adhere to a specific writing-style guideline. A commonly used style guideline in the criminal justice and criminology literature is APA. APA, an acronym for the American Psychological Association style, was created almost a century ago to standardize scientific writing in an effort to facilitate reading comprehension. APA presents guidelines and rules that dictate every element of a paper. With respect to the referencing, it includes how citations are handled both in text and in the references section, the required sections in a paper, heading formats, and punctuation. Without APA and other styles (e.g., MLA and *Chicago Manual of Style*), finding key information in scientific journal articles would be far more challenging. The sections described earlier are based on APA style. Please note that articles using a different style may deviate from this in some ways. You can buy a book on APA (2010), or you may access that information online at websites such as Purdue University's Online Writing Lab (OWL): <https://owl.english.purdue.edu/owl/resource/560/01/>. Style guidelines change on occasion, so you must ensure you are using the required edition, or at least the most current version. Once you have reviewed the abstracts (and possibly additional sections) of a journal article, what remains is a list of sources that will be used to construct the literature review. The next sections address how to take the sources, glean relevant information, summarize that information, and construct the literature review.

Method: Sections in journal articles that outline in detail the approach taken to answer the research question.

Findings: Section that reports the findings of a piece of research. In this section, the research questions are answered.

Discussion: Section found near the end of a journal article that follows the findings section.

Discussion sections are used to discuss the findings and to place them into the context of the existing literature.

Conclusions: Found at the end of journal articles and are generally short sections that briefly summarize the overall conclusions of the research, and why the findings are important. In many cases, the discussion and conclusion sections are combined.

Reference: Section in journal article offers the full citation information for every source cited in the body of a journal article.

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Writing the Literature Review

Using your final list of primary sources and your understanding of the anatomy of an empirical journal article makes you ready to summarize each primary source. The next sections describe strategies for doing so.

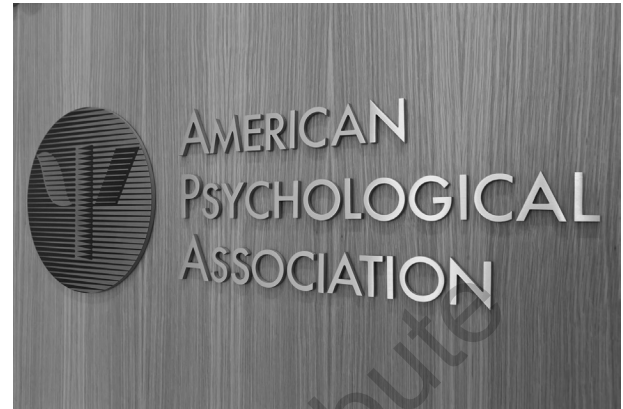
Summarize Each Original Source

5. Summarize in paragraph form important information from each source; include citations

A key step in constructing a literature review is to summarize each primary source in paragraph form using complete sentences. The summary should include several pieces of information. Many of those elements are listed here along with the likely location of this information in the original source:

- What is the article's full citation? This is found on the first page. The full citation should include author names, the year the piece was published, the title of the article, journal name and volume, and the page numbers where it appears.
- What is the purpose of the article? What is the research question? This information should be located in several places in the paper including the abstract, the introduction, and the conclusion sections.
- Why is the research important? What gaps are being addressed with this research? This information is commonly located in multiple locations such as the abstract, the introduction, and the conclusion sections.
- What is the theory used/tested (if any)? Not all research tests theory or is guided by theory. If the research in the source is guided by theory, then information about it should be mentioned in the abstract and introduction. In addition, some articles will have a standalone theory section.
- What sample was used? How was the sample obtained? How large is the sample? What are characteristics of the sample? Some of this information may be mentioned in the abstract, but a full accounting of the sample should be in the method section. In some cases, this information will be located in a subsection called "Sample" in the method section.
- How were data gathered? What years do the data cover? This information should be available in the method section.
- What are key definitions used? Although some key definitions may be offered in the introduction, all definitions should be described in the method section. In many cases, you will find a subsection labeled "Measures" in the method section that identifies definitions and measurement of key concepts. Identifying definitions in each piece is important because standardized definitions are not common across studies.
- What type of analytic technique was used? The analytic technique used to analyze the data may be mentioned briefly in the abstract. A full accounting of it will be found in the method section. In some cases, the Method section will have a subsection called "Analytic Technique" where this information is described.

- What are the findings? What was concluded from the data analysis? Findings and results are located in the Findings (also called “Results”) section. The overall outcome may also be mentioned in the abstract as well as the discussion and possibly conclusion section.
- What additional key themes emerged? Did findings support extant literature? Did findings fail to support extant literature? Are particular characteristics important to consider (e.g., race or gender)? Answers to these questions should be located in the discussion section. In addition, you may identify themes that are not described in the article.



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APA, an acronym for the American Psychological Association style, was created almost a century ago to standardize scientific writing in an effort to facilitate reading comprehension.

By using these questions as a guide, you can write a summary paragraph for each source. It is strongly recommended that the summary be written using complete sentences in paragraph form and that each sentence conclude with an in-text citation. (Consult APA or the style guide required to see how to construct in-text citations, or check out Purdue’s OWL at <https://owl.english.purdue.edu/owl/resource/560/02/> or <https://owl.english.purdue.edu/owl/resource/560/03/>). It is important to include the citation at the end of *each* sentence because later the sentences in the paragraphs will be disaggregated. Having the citation attached to each sentence means you will not have to try to figure out which article a statement came from later. Also, if you are pulling verbatim text from a primary source, it is *required* that quotation marks be placed around the copied text to indicate the statement is a direct quote. A direct quote will also require the page number(s) with the in-text citation or the paragraph number if it is an unpaginated source, such as a government brief. Failure to include page/paragraph numbers at this point would require revisiting the journal article or report to find where the quote is found. This is really time-consuming and tedious. In fact, there is strong reason to include page/paragraph numbers for each sentence in the paragraph. Although these page/paragraph numbers may be removed in the final version of the literature review, having them present will make referring back to the original piece for additional information or clarification easier if needed.

By using this strategy, summaries of two of our featured researchers’ studies are presented: Heather Zaykowski’s (2014) research on mobilizing victim services and Chris Melde and colleagues’ (Melde, Taylor, & Esbensen, 2009) study on teen gang members. You should be able to identify the location in the original sources of each piece of information in the summaries. As a novice researcher, you may find some of the summarized elements such as sample type and analytic techniques unfamiliar. That is to be expected at this stage, but students are encouraged to summarize these elements as best as possible. Later portions of the text, additional courses, and greater familiarity with original sources will better familiarize students with these elements.

With these examples, how to summarize a primary source peer-reviewed journal article should be clearer. With some practice, and greater familiarity with the anatomy of journal articles, summarizing becomes faster and easier. Although summarizing may become faster and easier, it is important to *focus* on the material. Having a deeper understanding of the sources—versus simply copying and pasting sentences from the articles to a word processing program—will pay dividends later when you need to identify themes and synthesize all of the material.





Example Summary of Zaykowski (2014)

While the number of victim services have increased over time, victim use of these services remain poor (Zaykowski, 2014, p. 365). The purpose of this research is to examine variation in use of victim services by violent crime victims and to ascertain the effect of victim and incident characteristics, particularly the role of reporting on the police to seeking victim assistance (Zaykowski, 2014, p. 365). This research adds to the literature in two ways. First, unlike existing literature that has used small nongeneralizable samples, this research uses a national generalizable sample. Second, although extant research focuses on female victims, the present research will consider male victims and victim service access (Zaykowski, 2014, p. 365). This research does not test theory (no citation, just observation). The research used 2008–2011 NCVS data and was restricted to violent victimizations (as property crime victims were not asked about victim services; Zaykowski, 2014, p. 366). The final sample size was 4,746 violent victimizations

(Zaykowski, 2014, p. 366). Help-seeking was ascertained based on respondent self-identification when asked, “Did you receive any help or advice from any office or agency—other than the police—that deals with victims of crime?” (Zaykowski, 2014, p. 367). Results include descriptives (means, standard deviations, and percentages) to describe the sample, as well as output from multivariate logistic regression (Zaykowski, 2014, p. 367). The findings show that victim services utilization differ across a broad variety of victim and incident characteristics including sex, race/Hispanic origin, marital status, bystander presence, and whether the violence was reported to the police (Zaykowski, 2014, p. 366). The results also indicate that victim service usage was more likely among sexual assault victims, females, and violence reported to the police (among others; Zaykowski, 2014, p. 367). In conclusion, Zaykowski (2014, pp. 367–368) finds that victims of intimate partner violence and family violence benefited the most from victim services.



Example Summary of Melde, Taylor, and Esbensen (2009)

“I got your back”: An examination of the protective function of gang membership in adolescence. *Criminology*, 47(2) 565–594.

The purpose of this research is to better understand a contradiction in the literature (Melde et al., 2009, p. 566). On the one hand, research shows that youth gang membership and violent victimization are related (Melde et al., 2009, p. 566). On the other hand, gang members report joining gangs because they report that being a gang member reduces risk of violent victimization by others (including other gang members; Melde et al., 2009, p. 566). The research is guided by three research questions: “1) What is the effect of gang membership on self-reported victimization? 2) What is the effect of gang membership on perceptions of victimization risk? and 3) What is the effect of gang membership on fear of victimization?” (Melde et al., 2009 p. 566). This research increases our understanding of the “gang membership-victimization literature by incorporating subjective concepts of fear and perceived risk of victimization with traditional self-report measures of actual victimization” (Melde et al., 2009, p. 573). The authors are not testing a theory in this research (no cite—observation not discussed in the article). To investigate these research questions, Melde and colleagues (2009) used data from surveys administered to a nonrepresentative sample of 1,450 students in 15 schools in 2004–2005 (Melde et al., 2009, pp. 573–575). Gang

membership was determined based on self-report of the student to the question: “Do you consider your group of friend to be a gang?” (Melde et al., 2009, p. 575). Students responding “yes” were coded as gang members (Melde et al., 2009, p. 575). The authors analyzed the data using basic descriptives to describe the sample (e.g., percentages, means, and standard deviations), and binomial and ordinary least-squares (OLS) regression analyses to address the three research questions (Melde et al., 2009, pp. 579–582). The findings indicate that when controlling for other factors, the effect of gang membership on victimization during the last three months was significantly increased for males, compared with for females (Melde et al., 2009, pp. 582–583). Nevertheless, the findings also show that gang-involved males do not perceive that they have a higher risk of victimization compared with females (Melde et al., 2009, p. 583). Furthermore, the results indicate that gang-involved males have a greater decline in fear of victimization than do females over time (Melde et al., 2009, p. 584). These results are consistent with prior literature, although prior literature relied on cross-sectional data versus the panel data used here (Melde et al., 2009, p. 584). Even though the findings are not generalizable, Melde and colleagues conclude that gang members provide youth with peace of mind and reducing their fear of violence, even if the reality is that victimization risk increases (Melde et al., 2009, p. 588).

Someone Has Already Focused on My Topic!

At times, while summarizing primary sources, you will discover that others have already addressed your topic and research question. Maybe even multiple parties have done so. Do not despair. As Zaykowski notes, a “literature review shapes the research question. If you have a research question in mind, then reading through the literature may indicate the need to revise the question.” This is just part of the continuous circling back that research entails. It is also an example of a bump in the road that must be dealt with. Research is not purely linear, and bumps in the road are common.

How can reviewing the literature aid in refining a research question? First, reading about existing studies focused on the same research question should reveal gaps in our understanding that require additional attention. Perhaps the research question has been considered broadly but not for women, juveniles, Latinos, the poor, or single individuals. Second, understanding the details about the methodology used in prior work may indicate an opportunity to revisit the topic using improved or an alternative methodology. For example, someone may have studied a topic using a small, local sample, which means the findings may not accurately describe a larger population. It may be that the same research question can be addressed using a large national survey that has recently become available. Third, a review of the literature on a particular topic may reveal that our existing understanding about the topic is dated. This may indicate that a new examination of this old question can increase our current understanding of the topic. A new study focused on the same question may be possible using newer or improved data. Or the new study may take place in a different context than the extant work (e.g., following a major policy change such as the legalization of marijuana in several states). In addition, existing work may have used simplistic analytic approaches because greater computing power was not available at the time of the original research. It may be that reexamining this research question using more powerful analytic software available today will lead to an enhanced understanding of the issue. In short, if your topic has been studied, look for gaps in our understanding or ways that the work can be improved.

Thematically constructed literature review: Review focused on the ideas found in the literature, not on the particular articles or authors.



Create a Summary Table

6. Create a thematically focused table of summarized information

At this point, all primary sources have been summarized individually. Many new researchers make the terrible mistake of stringing their summary paragraphs together and calling it a literature review. Simply stringing the summaries together does not make an appropriate literature review. Aside from this style of literature review being absolutely *brutal* to read, others cannot easily identify the major themes, gaps in the literature, agreement and disagreement in the literature, and other important information. This type of literature review doesn't provide any of the critical information. Identifying this information requires a thematically focused *synthesis* of the material, not an individual-source/author focus. It is worth repeating that stringing together summaries is *not* a literature review. Don't do it!

The need for a **thematically constructed literature review** cannot be overstated. Cuevas makes the point elegantly with his advice about how to write an excellent literature review: “Try to paint a picture, try to tell the story, and make an argument, for why you are conducting the research. Think about the literature review as putting forth the idea. Get less hung up on who wrote what, and talk about the ideas and concepts. The point is more about the ideas and less about who did what.” Keeping this in mind during the next steps will assist in constructing an excellent review. The next step toward that is creating a thematically focused table.

Making a summary table requires a researcher to move the sentences in each summary into a thematically focused structure. This is easily accomplished using a table with thematically



labeled columns. The columns should correspond to the questions used in creating the individual summaries. For instance, the first column should focus on the purpose of the research. The second column should focus on the research question. The rows should also be labeled. The first row should be titled “main point” or “main statement.” Each row after that should be labeled using the full citation for each original source used.

Next, you should copy and paste each sentence from each summary into the appropriate box. In other words, the column labeled “purpose” should include the copy-and-pasted (from the summaries written) purpose of each original source in that column. The column labeled “research question” should include the copy-and-pasted research question from each source in that column. An example of the structure of a summary is shown in Table 3.4.

The next task is to fill in the row of Table 3.4 labeled “main point/statement.” To identify what the main point for each column/theme is, you must study and think about the information presented in that column. If you have to summarize in one or two sentences the nature of research about that theme, what would it be? These main point/statements are your own words. They can’t be found in any other source.

For example, does the research question focus on the total population in each study neglecting a relevant subpopulation? A main point might be “Extant research has identified much about the relationship between X and Y, however, without exception, this research has focused on the total population. What is needed is an examination of females only.” Or, “Research has identified several key predictors of dating violence among teens. Missing from the literature however is a focus on Latino teen dating violence.” Is theory never used to study this issue? If so, a main point might be “A review of the literature indicates that all research conducted has been atheoretical in nature.” Does the material in the sample column suggest that most research on the topic is based on small samples? If so, a main point might be “Existing examinations are focused only on small, local samples limiting our ability to generalize to larger populations.” Is there disagreement or a lack of consistency about key definitions? If that is the case, then a main point might be, “A review of the empirical literature demonstrates tremendous variation in the definition of ‘sexual violence’ used across studies.” Are there four major findings apparent in the literature? If so, a main point might be, “Evidence indicates four major findings including . . .” Table 3.5 offers nouns and verbs frequently used when constructing main points. Remember, the purpose of the main point statement is to identify an overall summary based on a synthesis of material found for each theme in the table. With the table completed, and the information synthesized, you have the elements needed to write the first draft of the literature review.

Table 3.4 Thematically Based Table

Thematically Based Table	Article Purpose	Research Question	Why Important	Theory	Sample Used	Sample Size	Data Info	Key Definitions	Analytic Technique	Findings	Additional Key Themes
Main Statement											
Original source 1											
Original source 2											
Original source 3											
Original source 4											
Original source 5											
Original source 6											

Preparing for the First Rough Draft

7. Prepare for the first draft by identifying an organizational approach and writing strategically

With the summary in Table 3.4 completed, you have the raw materials needed to write a first draft. Before doing so, it is important to have decided on an organizational approach and a writing strategy. Establishing the organization of the literature review and using a writing strategy will facilitate a strong first draft of the review.

Organizational Approaches

Recall that the purpose of a literature review is to give an overall view of the literature as it pertains to the proposed research. In addition, the literature review needs to make clear what addition to the literature the proposed research will make. Doing that is accomplished using one of two primary organizational structures: descriptive organization or chronological organization.

A **descriptive literature review** organization identifies and describes the major elements of a particular topic. It shares with the reader what is known about the topic currently. This type of review typically does not present how understanding about a topic has changed over time. For example, a descriptive literature review focused on victimization risk may discuss what is known today about risk including the important role of gender, race, and age of the victim. This literature review may be organized in the following way:

- Introduction: Victimization Risk and Personal Characteristics
- Subsection 1: Gender and Victimization Risk
- Subsection 2: Race and Victimization Risk
- Subsection 3: Age and Victimization Risk
- Subsection 4: The Proposed Study and Why It Is Important

The organization of this literature review describes the currently identified main themes presented in subsections, followed by what the proposed research will add to our understanding and why it is important to conduct it. Subsections (with headings) are very useful in that they allow you to “organize the information and helps the reader,” according by Zaykowski. After reading this descriptive format literature review, the reader will have a good understanding of what is known, as well as information on why the proposed research is important.

Table 3.5 Constructing a Main Point

To construct a main point, use the appropriate noun and verb in context

Noun	Some Form of Verb
Scholars	indicate(s)
Findings	show(s)
Results	demonstrate(s)
Researchers	identify(ies)
The authors	reflect(s)
Current understanding	suggest(s)
Research	argue(s)
The literature	note(s)
Evidence	find(s)
Studies	speculate(s)
	focuses on
	examine(s)

Descriptive literature review: Organization format for a literature review that identifies the major elements of contemporary understanding about a particular topic.

Chronologically organized literature reviews: Organized to describe changes and growth in our understanding of a topic over time. The changes described may be based on relevant substantive themes, focused on change in methodology, change in theory, or any other relevant theme.

Another useful organizational approach is chronological. A **chronologically organized literature review** describes changes and growth in understanding of a topic over time. As the name suggests, you would describe earlier studies first, then more contemporary ones, and then a section identifying the proposed research and why it's important to conduct. For example, a chronologically organized literature review focused on violence against college women may discuss how our understanding of this topic has changed over time. This literature review may be organized in the following way:

Introduction: Understanding of Violence Against College Women Over Time

Subsection 1: Era 1—Foundational Studies: Mary Koss and Colleagues

Subsection 2: Era 2—Use of Nationally Representative Studies

- a. Mary Koss and Colleagues
- b. National Crime Victimization Survey findings
- c. Bonnie Fisher and Colleagues

Subsection 3: Era 3—Use of Large Nonrepresentative Samples

- a. Krebs and Colleagues—Campus Sexual Assault Survey
- b. Cantor and Colleagues—AAU Survey

Subsection 5: Era 3—Use of Individual Campus Climate Studies

Subsection 6: The Proposed Study and Why It Is Important

Using a chronological organization should identify changes in understanding of a subject over time. The change over time can be focused on the substantive changes in understanding, changes in methodological advances, or changes resulting from theoretical development. Which type of change over time is focused on is dependent on the purpose of the proposed research.

Should you decide to organize your literature review using a chronological methodological approach, you might offer a section discussing foundational methodology tools, followed by a section devoted to advanced methodologies that became available, and finally a section focused on current understanding using the most up-to-date tools. Presented in this fashion, a reader can see how *understanding* in the field has grown over time. Furthermore, it makes clear how the proposed research will build on what is currently known.

A word of caution—a chronological organization or any kind does not mean that a researcher should simply offer summaries of each author's research in the order in which they were published. Rather, the researchers must write the review based on major *periods of understanding* in the field. The periods are the topic, and the individual pieces of research are synthesized to provide support for what occurred in each time period. For instance, you may note that the initial research in the field pointed to the importance of considering gender. A later burst of research attention built on this knowledge by demonstrating the need to focus on race as well. And the most recent period of research makes clear the need to consider gender, race, and age simultaneously. The final section of the review may cover the proposed research, which seeks to examine age by noting it has been neglected in earlier work.

A Writing Strategy: MEAL

You should also be guided by a writing strategy. An easy to use and effective writing strategy that is often widely used by researchers is summed up by the acronym MEAL.² MEAL describes the strategy used not only for the entire literature review but also for each section in the literature review.

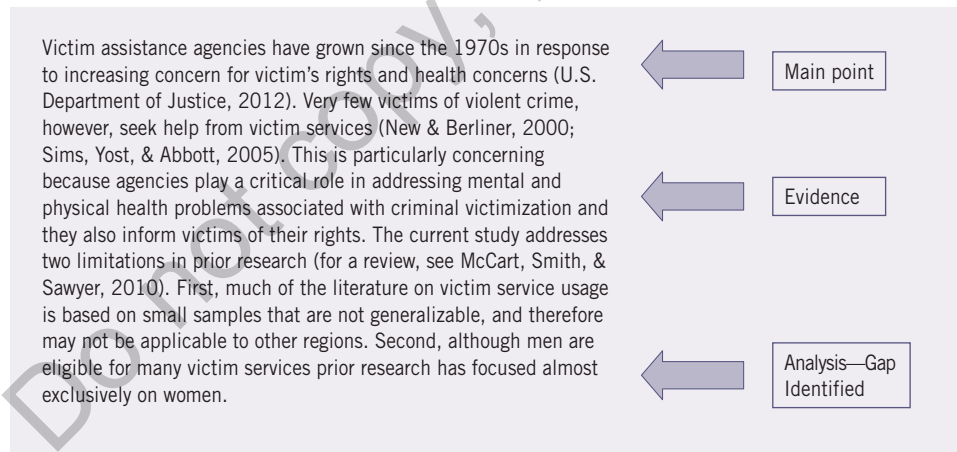
M signifies the *main point*, which should describe the current state of or quality of the literature overall. In addition, the first sentence (or sentences) of each subsection should identify the main point of that section. Note that the main points placed in the first row for each column in the summary table in Table 3.2 can be used for this purpose.

E indicates *evidence*. Evidence for the main point follows the main point statement. Evidence in an academic literature review comes in the form of information gleaned from primary source material. Note that the statements (with citations) in the cells of the summary table in Table 3.2 are used as evidence in the literature review.

A denotes *analysis*. After the presentation of evidence, you need to identify the take-away message from the section. That message may center on important examinations that are missing in the literature or on agreement or disagreement that needs to be highlighted. The analysis should tell the reader in a sentence or two the most important information he or she should have gained from reading this section.

L represents *linking*. Linking occurs in two ways. First, it refers to the need to include a statement that connects the subsection back to the overall main point of the literature review. Second, linking refers to including segues between sections. For instance, you may comment, “There is agreement among researchers on the role of X on Y. In contrast, there is little agreement when considering the role of W on Y as the following section shows.” Linking in a literature review ensures that there is flow from one section to section and that the review is cohesive.

MEAL is a very useful tool, but it need not be used in an overly rigid way. You can use a MEAL-like structure and vary the parts. For example, an M-E, M-E, M-E, A, L is a common strategy. Note the elements of MEAL in this paragraph from Zaykowski’s (2014) victim services research.



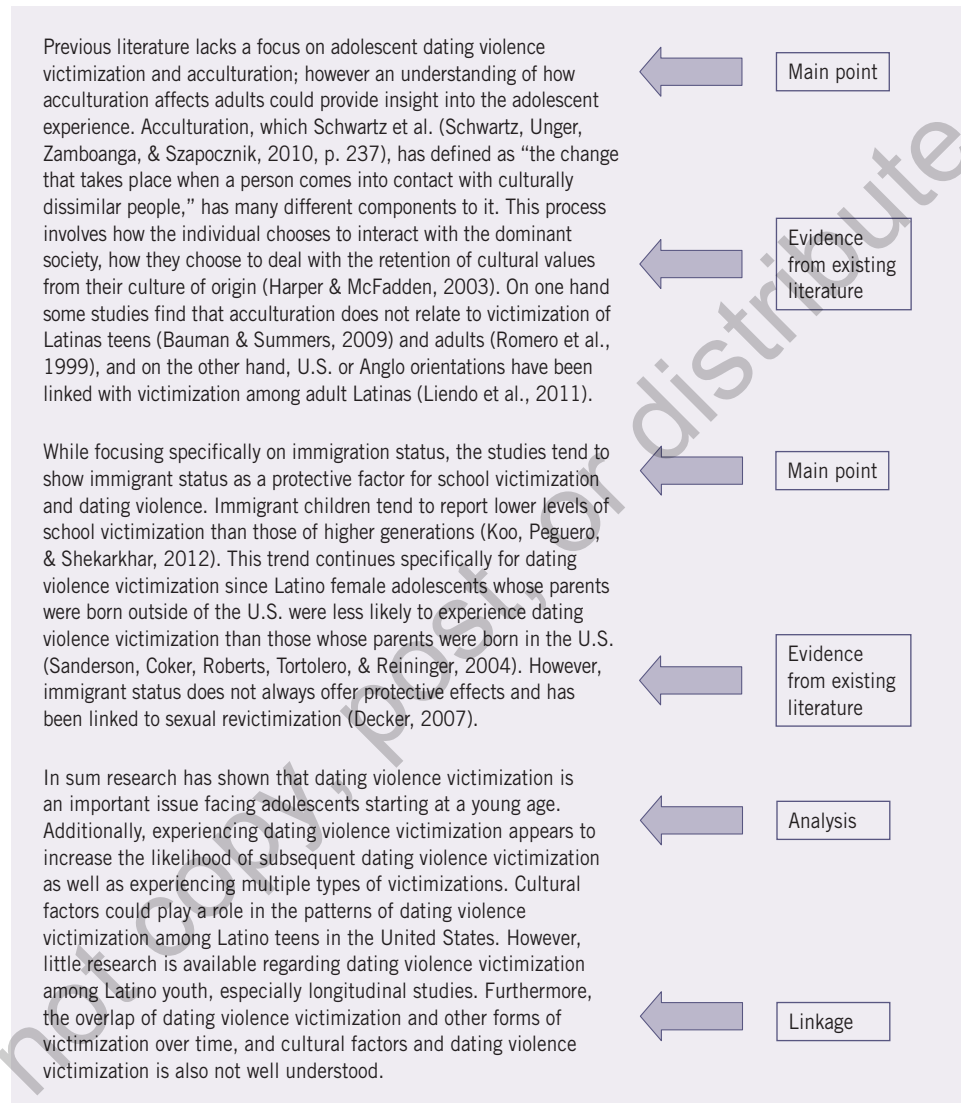
²The MEAL writing strategy proposed here was adapted for use in writing literature reviews by Sean McCandless.

MEAL: Writing strategy in which one begins with a *main point*, offers *evidence*, *analyzes the evidence*, and then *links* that material to the main point.



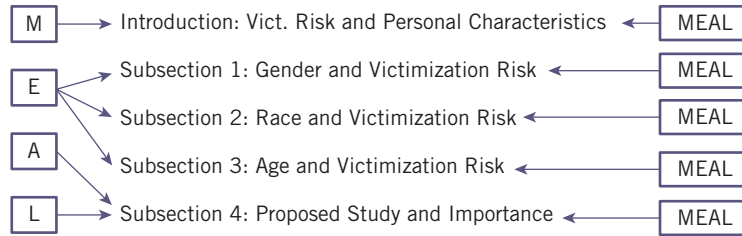


The following are several paragraphs from a “cultural factors” subsection in Cuevas and his colleagues’ literature review focused on Latino dating violence (Sabina et al., 2016). Note the use of MEAL and the clearly stated main point, evidence, analysis, and linkage in this example.



This example highlights the very important use of main point statements leading off each section. This example also demonstrates the synthesized use of evidence that is presented based on the topic of interest (versus author focused). Although the text at the beginning of this section on cultural factors is not shown here, the concluding sentence in this section ties back to the earlier stated purpose of that section.

As noted, a well-constructed literature review uses MEAL in two ways. It structures the full literature review, and it is used to structure each subsection. When we return to an earlier example of a descriptively organized literature review, we see that a reader would expect to see MEAL in the following places:



Write the First Draft

8. Write the first draft

At this stage, you have all the skills, strategies, and information needed to construct the first draft of your literature review. You have a table that has clearly identified main points and evidence (with citations) for each theme. You have selected the organization of the literature review as either descriptive or chronological. You have the understanding of using MEAL to organize this material using a main point + evidence + analysis + linkage approach. What remains is to put pen to paper (or fingers to keyboard) to aggregate these pieces in an orderly fashion. When writing the first draft, do not go for perfection in terms of every word used or every sentence typed. Focus instead on getting the overall structure and organization in place. You will devote time to editing, proofreading, and polishing the draft next.

Edit, Proof, and Polish

9. Edit, proof, and polish (repeatedly)

You should not expect to have a completed literature review with the construction of the first draft. Rather, a well-written literature review requires repeated edits, proofing, and polishing. When you feel you have completed the literature review, you should check it carefully to ensure you have included important elements that may have been lost (or never been included) such as main points, evidence, analysis, linkages, citations, quotations, and stylistic considerations. Another helpful strategy for proofing is to read your own paper aloud to see whether it flows. Reading your paper aloud forces you to focus on what is written, not on what you think was written. It is always good practice to ask someone who has not been working on the literature review to read it to ensure it is clear, flows well, and is free from error.

Common Pitfalls of Literature Reviews



Writing literature reviews takes time, focus, and patience. A part of the process is to verify that you have avoided some common errors. This section identifies several pitfalls that are found in literature reviews. These include not allowing enough time, constructing the review around authors and not themes, and a lack of organization and writing strategies.

Not Allowing Enough Time

A common pitfall encountered is not allowing enough time to write your literature review. You can see from this chapter that no step in writing a literature review is difficult. What is apparent, though, is that each step and the whole process take time. Writing a literature review cannot be done in a night or even two. You must set aside a good amount of time to search for and through potential primary sources. Time is needed to summarize each article.

Additional time and effort are required to create a summary table and to consider the material so that main points can be identified. Finally, writing the review takes time. Writing literature reviews is not a task that can be done well when rushed. To avoid this pitfall, allow adequate time to do a thorough and excellent job.

Failing to Focus on Themes

Although we warned against it earlier, and although professors warn students in classes, it is exceedingly common for students to construct a literature review focused on authors instead of on themes. A literature review that describes the work of one author after another, after another, is not a literature review. When each paragraph focuses on one piece of research and its author instead of on the substance of the topic, not only is it inhumane to ask someone to read it, but it is also extremely difficult to identify the overall state of the literature. A literature review that fails to synthesize the materials and present main points is not a literature review. To avoid this pitfall, ensure the review is thematically based, not author or individual research article based.

Lack of Organization and Structure

A third pitfall of writing literature reviews is to fail to organize and structure the material in a meaningful way. This chapter presented two useful formats for the review: descriptive and chronological. A well-constructed literature review will use one of these approaches. This chapter also presented information on the importance of MEAL as a writing strategy. MEAL is useful for the overall review, and it is useful for subsections in the review. If a review fails to identify main points, offer evidence, analyze the material, and link it to other sections of the review, the review is incomplete and poorly executed.

Quoting Problems

Common pitfalls in writing a literature review involve the use of quotes. As noted in this chapter, a literature review should focus on the ideas in the literature, not on what any specific author has written. For that reason, the excessive use of direct quotations should be minimized. Zaykowski shares, “Avoid using direct quotations—unless there is one or two that really are important in their original form. Too many quotations make it difficult to read and also isn’t convincing to the reader that you have an original argument.” Taken to an extreme, some writers over-quote by quoting multiple paragraphs and multiple pages of text. Zaykowski notes, “It is not okay to do this. Even though technically the writer is giving the author credit (assuming that the author is recognized), it is not enough of the writer’s own thoughts. The writer didn’t actually write anything, put into their own words, or in many cases interpret the quote’s significance.” When writing, the writer needs to include his or her own thoughts, and offering pages of quoted material fails in that regard.



Miscellaneous Common Errors

Beginning researchers make a few additional mistakes that are easily remedied. First, never type the title of an original source in the literature review. Similarly, never use the author or researcher’s full name in the literature review. Many learning to write literature reviews construct needlessly bulky sentences similar to

In an article titled “I Got Your Back’: An Examination of the Protective Function of Gang Membership in Adolescence,” authors Chris Melde, Terrance J. Taylor and

Finn-Aage Esbensen studied the “gang membership-victimization literature by incorporating subjective concepts of fear and the perceived risk of victimization with traditional self-report measures of actual victimization” (2009, p. 573).

The problem with this sentence is the presentation of the title, the full names of all the authors, and a direct quote. Rather, the title of the work should only be presented in the references. The authors’ full names belong in the references as well. Only authors’ last names belong in the text. Finally, the writer of the faux sentence used a quote when the writer’s words would do. This sentence could be improved as

Melde and colleagues (2009) investigated the gang membership-victimization literature with an emphasis on the concepts of fear and perceived risk of victimization (p. 573).

Academic literature reviews should rarely if ever use the word *I*. *I* is not appropriate because the literature review is focused on what the literature offers, not on how the literature review writer accessed and worked with it. As an example, sentences such as “I found two articles focused on race and victimization. I summarized them and learned that . . .” should never be included. Rather, the point should be conveyed as “A review of the literature makes clear the importance of considering race when identifying victimization risk.” The literature review is about the knowledge, not about the person reading the knowledge.

Similarly, academic literature reviews should not use the word *prove*. In social science research, you never *prove* anything. Rather, researchers conduct research and in doing so find evidence to support, or fail to find evidence to support, relationships, theories, and notions about how the world works. For this reason, never use the word *prove* and instead note that there is, or is not, evidence for whatever topic is at hand.

Failure to Justify the Need for the Proposed Research

Finally, a common error in literature reviews is the failure to conclude with a strong case for why the proposed research is important and needed. The proposed research may be filling a gap in the literature, focus on an ignored population or concept, use improved data or measures, use improved or more appropriate methodology, or myriad other reasons. Do not assume the reader understands or knows the justification. It is the researcher’s responsibility to state clearly the justification for the proposed research.

Ethics and the Literature Review

Ethics are an important consideration during the construction and writing of a literature review. There are two major ethical considerations to consider when conducting a literature review: plagiarism and accurate portrayal of other’s research.



Plagiarism

Although most people have a notion about what plagiarism is, most people are unaware of the fact that plagiarism is fraud and theft, and that it can be committed in many ways. Most simply, **plagiarism** is fraud and theft of another person’s words, thoughts, ideas, or other creations (e.g., songs or artwork) and the presentation of that material as one’s own. It is a highly unethical and immoral act that is no different than going to another person’s home and

Plagiarism: Fraud and theft of another person’s words, thoughts, ideas, or other creations (e.g., songs, artwork), and the presentation of that material as one’s own.

Cloning: Type of plagiarism involving the direct copying and pasting of others' words without citing the original author.

Mosaic plagiarism: Form of plagiarism in which one takes another person's text and replaces some words with synonyms without citing the originator of the idea. In addition, mosaic plagiarism also occurs when one strings together verbatim fragments from multiple authors or sources without citing the original authors.



stealing his or her money or items of value. Copying and pasting others' words verbatim—a practice also known as **cloning**—without citing the original author is the most widely recognized form of plagiarism. It is easily avoidable by using quotation marks around the verbatim text and properly citing the original author and source.

Less recognized is that plagiarism also includes summarizing or paraphrasing another's work without properly crediting them. Even if every word used in the summary or the paraphrase differs from the original text, failure to include proper citation is fraud and theft as the *ideas* of the original author are being passed off as someone else's.

Mosaic plagiarism is a form of plagiarism that occurs in multiple ways. One presentation of mosaic plagiarism is when a writer takes another person's text and replaces some words in the statement with synonyms. Failure to cite the original author in cases like *this is mosaic plagiarism* and is unethical. Even if a writer uses many synonyms, the ideas presented are still those of the original author, and the resulting text is theft. Another form of mosaic plagiarism occurs when a writer strings together verbatim fragments from multiple authors or sources without citing the original authors. Again, the issue is the theft of the ideas, not the words. Plagiarism is an unethical act that can (and should) result in negative consequences for the offender. One way to avoid this pitfall is to always cite and credit the original author. If ever in doubt, cite and credit the original author.

Why do people plagiarize? It could be because of a conscious decision to engage in unethical behavior that someone feels he or she can get away with. In contrast, many recognize that plagiarism comes from other motivations. Zaykowski believes the reasons some plagiarize are complex, although a common theme is because a student is overwhelmed by school, work, and family obligations. In some cases, plagiarism occurs because of sloppiness or disorganization on the part of the writer during the writing process. A person may type a sentence verbatim with the intention of citing the original author later. If the citation is forgotten, the result is plagiarism. The process outlined in this chapter offers an organized and systematic approach to writing a literature review that should minimize the possibility that a citation becomes lost or separated from the original idea. It is the writer's responsibility to remain organized to avoid plagiarism regardless of the causes.

Accurate Portrayal of Existing Research

An issue to be sensitive to in constructing a literature review is the misrepresentation of existing research. One way an original source is misrepresented is to rely on some other source material that offers a summary of an original source. There is no guarantee that any summary of an original source is correct. In fact, often it is incorrect. You can never be sure that an original source is accurately described in anything other than the original source. Failure to access the original source may save time but often at the cost of accuracy. Even though accessing the original source may take a little more time, the result is the security of knowing the description written about the original source is accurate.

At times, extant research is criticized unfairly and inaccurately. Although it is true that no research is perfect, and all research has limitations, ensure any criticism leveled is fair. First, remember that the writer is reviewing the research, not the author. Comments about an author or researcher being careless, or malicious, stupid, or clueless are always inappropriate. It seems this sort of advice is not needed, but experience demonstrates it is (this includes criticizing individuals on social media; it gets seen and shared).

Second, should someone criticize existing research for failing to use a particular analytic technique, they must be certain that the technique (and computing power needed for that technique) was available at the time the research was conducted. Remember, it was not until 1981 that the first widely used personal computer (PC) was developed (with a maximum of 10 KB of memory on the hard drive), and not until the late 1980s that the cost of PCs declined such that they could be found in many homes and offices. The widespread use of

SPSS* became available on a personal computer using DOS from 1984 to 1992. But it was not until 1992 to 1996 that SPSS was made available in a Microsoft® Windows™-based environment (SPSS Inc., 2009). Earlier analyses relied on mainframes and other time-intensive approaches. Prior to 1970, it could take up to 24 hours to get the results from *one* regression, assuming the researcher even had access to the required technology (Ramcharan, 2006). When finally obtaining those results, which were generally printed and made available in some other location, it was not uncommon to discover that an error was made, and the process had to begin again. Today, getting results from one regression is instantaneous on a laptop in a coffee shop, plane, or beach destination. Therefore, be cautious when criticizing earlier researchers for using basic analyses when it may reflect the most advanced technology available at that time.

A similar unfair criticism focuses on data. The advent of technology has enabled nationally representative surveys that simply were not possible in the not-so-distant past. Previously, researchers had to rely on easier to obtain, smaller, and local samples to conduct research. Similarly, you must be knowledgeable about the data by someone else before leveling unfair criticism. For instance, some criticize research using National Crime Victimization Survey (NCVS) data for failing to consider the immigration status of the victim. The fact is that the NCVS data do not, and never have, gathered information on respondents' immigration status. In addition, be cognizant that data change over time. Some also criticize the NCVS for failing to gather data on sexual assault. The NCVS underwent a massive redesign in 1992 (approximately 25 years ago), and one change made was that it started gathering data on sexual assault (and continues to do so). Yet, even today, some criticize the NCVS for not gathering data on sexual assault. It seems that those offering this critique are repeating it from old sources (and not accessing original sources) or that they simply lack knowledge about the data.

In sum, when describing existing literature and research, be accurate, access original sources, and be sensitive to changes in the field over time. In addition, be diplomatic. A person never benefits by implying (or stating clearly) that early research is poorly conducted or that earlier researchers were less than dedicated scientists working hard to understand something about our world.

Literature Review Expert— Sean McCandless, PhD

Sean McCandless, PhD, is an academic resources coordinator and instructor in the School of Public Affairs at the University of Colorado Denver. Prior to coming to the university, Sean worked as an editor, where literature writing skills were mandatory. Since his arrival at the university, Sean has taught a variety of courses at the undergraduate and graduate levels including English writing, public administration, and political science. He worked in academic writing centers for more than a decade and continues to guest lecture in numerous undergraduate and graduate classes on the topic of literature writing skills and APA style.

Sean credits his becoming a writing expert to being a huge *Star Trek* fan. As an 11-year-old, he developed and wrote three scripts that he submitted to *Star Trek* for consideration. At the time, the show allowed fans to submit speculative scripts. Of the three submitted, two were politely declined, but the third caught the eye of a producer who



Courtesy of Sean McCandless

*IBM® SPSS® Statistics / SPSS is a registered trademark of International Business Machines Corporation.

responded. The producer, not apparently recognizing he was corresponding with an 11-year-old, noted how much potential he saw in Sean's ideas and writing skills. This prompted Sean to write as much as possible, which eventually landed him a position in a university writing center. It was in this role that Sean honed his writing skills and developed the ability to teach others how to write literature reviews. Learning to teach writing literature reviews came not only from more writing but also from dissecting published literature reviews to understand their structure. After a short period of time, he became the go-to guy at the university for advice on writing literature reviews.

When asked about whether some people are naturally good writers and others are not, Sean comments that it doesn't matter. Sean strongly believes that anyone can be a good writer with the correct skills and environment. Regardless of one's background of natural skills, he argues that if a person learns the correct skills, and practices those skills, they will become a better writer or rewriter. In this, Sean agrees completely with author Robert Graves's statement, "There is no such thing as good writing. Only good rewriting." Being a natural writer is not relevant. Developing skills and practicing writing is relevant.



Sean has seen some common errors when working with students writing literature reviews. A major error is that students often do not know what the purpose of their writing is or what the purpose of a literature review is. Not surprisingly, Sean notes that without clarity in purpose, a writer will never have clarity in writing. A second common error is that students frequently cannot identify a main point at the level of the whole paper or at the level of a paragraph. It is not enough to offer a series of uncoordinated details in a paper; the writer must identify the main point. Sean notes this skill in summarizing complex information is one engaged in daily in other contexts. Think for example of someone asking, "How was your day?" Most people respond with a summary of the main points of their day: "Had a wonderful meeting with a new client and celebrated my anniversary out at a nice restaurant." This summary offers the main points of the day versus a litany of each activity, no matter how small, of the day.

To become a better writer, Sean recommends reading other literature reviews and dissecting them. Can the reader find the main points? The evidence? Linkages? Furthermore, Sean encourages new writers to practice summarizing complex material in a few sentences (i.e., practicing developing main points). This practice can be done by looking at other literature reviews or any type of writing such as movie reviews and newspaper stories. Identify how MEAL approaches work and how a failure to offer a framework does not.

Chapter Wrap-Up

By building on the material presented in the first two chapters, this chapter presents the steps and skills needed to write a literature review. Understanding these skills removes or minimizes the anxiety out of writing and constructing a literature review. As Cuevas notes, writing a good literature gets easier over time as the skills become more engrained and the literature becomes more familiar. The steps covered in this chapter include identifying what appropriate sources for a review are, where to find them, and how to avoid predatory journal pieces. Steps summarizing the original sources were offered, culminating in a table (Table 3.4) that has all of the information needed to write the review. In addition, two organizational approaches—descriptive and chronological—were presented. A very useful writing strategy—MEAL—was introduced and described to assist writers with writing the review. The chapter also provides information on common pitfalls to avoid when writing a literature review. In addition, the ethics associated with writing a literature review were highlighted, including plagiarism in its many forms and misrepresenting existing research. Finally, the chapter concludes with an interview with Sean McCandless, an expert literature review writer and academic resources coach. In this interview, Sean discussed his experience as a writing coach. In his



Table 3.6 Featured Research: Abstracts

Researcher	Articles	Abstract
Rod Brunson	Brunson, R., & Weitzer, R. (2009). Police relations with Black and White youths in different urban neighborhoods. <i>Urban Affairs Review</i> , 44(6), 858–885.	Much of the research on police–citizen relations has focused on adults, not youth. Given that adolescents and particularly young males are more likely than adults to have involuntary and adversarial contacts with police officers, it is especially important to investigate their experiences with and perceptions of the police. This article examines the accounts of young Black and White males who reside in one of three disadvantaged St. Louis, Missouri, neighborhoods—one predominantly Black, one predominantly White, and the other racially mixed. In-depth interviews were conducted with the youths, and the authors’ analysis centers on the ways in which both race and neighborhood context influence young males’ orientations toward the police.
Carlos Cuevas	Sabina, C., Cuevas, C. A., & Cotignola-Pickens, H. M. (2016). Longitudinal dating violence victimization among Latino teens: Rates, risk factors, and cultural influences. <i>Journal of Adolescence</i> , 47, 5–15.	This study uses data from two waves of the Dating Violence Among Latino Adolescents (DAVILA) study and focuses on the 1) rates of dating violence victimization by gender, 2) risk of experiencing dating violence victimization over time, 3) association of dating violence victimization with other forms of victimization, and 4) association of immigrant status, acculturation, and familial support with dating violence victimization over time. A total of 547 Latino adolescents, from across the United States, aged 12e18 at Wave 1 participated in both waves of the study. Rates of dating violence were around 19% across waves. Dating violence at Wave 1 and non-dating violence victimization were associated with an elevated risk of dating violence during Wave 2. Cultural factors did not distinguish between dating violence trajectories, except for immigrant status and familial support being associated with no dating violence victimization. Overall, dating violence affects a large number of Latino teens and tends to continue over time.
Mary Dodge	Dodge, M., Starr-Gimeno, D., & Williams, T. (2005). Puttin’ on the sting: Women police officers’ perspectives on reverse prostitution assignments. <i>The International Journal of Police Science & Management</i> , 7(2), 71–85.	Reverse police prostitution stings, which target men by using female police officers as decoy prostitutes, are becoming a common method in some United States cities for controlling the problem of solicitation for prostitution. The role of policewomen as decoys has received scant attention by scholars, though critics and traditional feminists view the practice as further evidence of the subjection and degradation of women in law enforcement. This article presents participant field observations of how reverse prostitution operations are conducted in Aurora, Colorado Springs, and Denver, Colorado and qualitative interview data from 25 female police officers who discuss their experiences as prostitution decoys. The findings indicate that female officers view the decoy role as an exciting opportunity for undercover work, despite the negative connotations of acting like a whore. According to the officers who work as decoys, it adds excitement and variety and offers potential for other opportunities for advancement within the police department in contrast to the rather mundane duties often associated with patrol.
Chris Melde	Melde, C., Taylor, T., & Esbensen, F. (2009). “I got your back”: An examination of the protective function of gang membership	The threat of victimization has been regarded as a central feature in both the development and the continuation of youth gangs. Although many studies find the need for protection to be a common reason youth join gangs, recent literature suggests that gang members are at an increased risk of victimization. Given this seeming contradiction between expectations and reality, the current article examines the “objective” and “subjective”

(Continued)

Table 3.6 (Continued)

Researcher	Articles	Abstract
	in adolescence. <i>Criminology</i> , 47(2) 565–594.	dimensions of gang member victimization using panel data collected from youth between the ages of 10 and 16 years. Findings reveal that gang members report higher levels of actual victimization and perceptions of victimization risk than non-gang-involved youth. Gang membership is associated with reduced levels of fear, however. Overall, although gangs may not be functional in terms of actual victimization, they seem to decrease anxiety associated with the threat of future victimization.
Rachel Santos	Santos, R. B., & Santos, R. G. (2016). Offender-focused police intervention in residential burglary and theft from vehicle hot spots: A partially blocked randomized control trial. <i>Journal of Experimental Criminology</i> , 12, 373–402.	Objectives: To test an offender-focused police intervention in residential burglary and residential theft from vehicle hot spots and its effect on crime, arrests, and offender recidivism. The intervention was prevention-focused, in which detectives contacted offenders and their families at their homes to discourage criminal activity. Method: The study was a partially blocked, randomized controlled field experiment in 24 treatment and 24 control hot spots in one suburban city with average crime levels. Negative binomial and ordinary least squares (OLS) regression were used to test the effect of the presence of intervention and its dosage on crime and offender recidivism, and examination of average and standardized treatment effects were conducted. Results: The analyses of the hot spot impact measures did not reveal significant results to indicate that the treatment had an effect on crime or arrest counts, or on repeat arrests of the targeted or non-targeted offenders living in the hot spots. However, the relationships, while not significant, were in a promising direction. Conclusions: The collective findings from all four impact measures suggest that the intervention may have had some influence on the targeted offenders, as well as in the treatment hot spots. So, while the experimental results did not show an impact, they are promising. Limitations include large hot spots, the low case number, low base rates, and inadequate impact measures. Suggestions are provided for police agencies and researchers for implementing preventive offender-focused strategies and conducting studies in suburban cities.
Heather Zaykowski	Zaykowski, H. (2014). Mobilizing victim services: The role of reporting to the police. <i>Journal of Traumatic Stress</i> , 27(3), 365–369.	Victim assistance programs have grown dramatically in response to the victim's rights movement and concern over difficulty navigating victim services. Evidence, however, indicates that very few victims seek assistance. The present study examined factors associated with victim's service use including reporting to the police, the victim's demographic characteristics, the victim's injury, offender's use of a weapon, the victim's relationship to the offender, and the victim's mental and physical distress. Data came from a subset of the National Crime Victimization Survey 2008–2011 ($N = 4,746$), a stratified multistage cluster sample survey of persons age 12 years and older in the United States. Logistic regression models indicated that fewer than 10% of victims of violent crime sought help from victim services. Reporting to the police increased the odds of seeking services by 3 times. In addition, the odds of victims attacked by an intimate partner seeking services were 4.5 times greater than victims attacked by strangers. Findings suggest that additional exploratory work is needed in uncovering the mechanism of police involvement in linking victims to services. Specifically, do police understand what services are available to victims and why are police more likely to inform some types of victims about services more than others?

experience, he learned that everyone has the potential to be a great writer (because of rewriting) when exposed to the appropriate skills and environment. Although we have presented a fair amount of text from our case studies in regard to literature reviews, Table 3.6 offers each study's abstract. Notice the information that each abstract offers and how useful it is in identifying whether the article would be useful in a literature review you are writing.

In the next chapter, we shift gears and begin discussing the information necessary to design a study. This includes a discussion on concepts, definitions, measurements, and variables. The chapter discusses measurement as well as the advantages and disadvantages of different approaches to measurement. Like the previous chapters, a section is devoted to common pitfalls in the hopes that they can be avoided. And, of course, ethical consideration during the nuts and bolts planning of research is emphasized.

Applied Assignments

1. Homework Applied Assignment: Conducting a Literature Search

Using the same **two** peer-reviewed journal articles you used for your homework in Chapter 2, conduct a search for literature related to those articles. Be sure to use Boolean operators and filters. Present your findings in a series of tables (e.g., Table 2.2) shown in this chapter. Given searching is an iterative process, be sure to show all tables and results for each iteration. Be prepared to justify why you stopped your search when you did. Be prepared to discuss your findings in class.

2. Group Work in Class Applied Assignment: Summarizing Research Literature

As a group, select two articles from the following case studies: Dodge, Cuevas, Brunson, and Santos. Once your group has selected the article, summarize each article following the approach described in step 5 (see p. 78).

Remember to use the bulleted tips provided in step 5, and write in complete sentences. Be able to speak to why this approach would be useful in constructing a literature review. Next, create a thematically based table using the two selected articles based on the thematically based table presented in step 6 in the chapter. Be prepared to discuss and share your summaries in class.

3. Internet Applied Assignment: The Results of Plagiarism

Search the Internet to find three examples of people who lost their job, or were denied a high-profile position, because they plagiarized. Provide a summary of who they are, the jobs they had (or were seeking), and any reason they gave for the plagiarism. Provide details on the type of plagiarism they engaged in and why it was wrong. Describe the outcome of their unethical act and how you think it may affect them in the future. Please provide a paper addressing these topics to your professor/instructor.

KEY WORDS AND CONCEPTS

Abstract 74	Empirical 65	Key words 76
Boolean operators 71	Empirical peer-reviewed journal articles 65	Literature review journal articles 66
Chronologically organized literature review 84	Filters 71	MEAL 85
Cloning 90	Findings 77	Method 77
Conclusions 77	Impact factors 68	Mosaic plagiarism 90
Descriptive literature review 83	Introduction section of a journal article 76	Original sources 64
Discussion 77		Peer-reviewed journal articles 64

Phrase 71
Plagiarism 89
Predatory journals 67
Predatory publishers 67

Primary sources 64
References 77
Saturation 73
Term 71

Thematically constructed literature review 81
Theoretical journal articles 66

KEY POINTS

- A literature review presents an understanding of the overall state of the literature by surveying, summarizing, and synthesizing existing literature. Reviews identify major themes, demonstrate where there is agreement and disagreement, identify limitations of prior research, and expose gaps in our understanding about a topic. A well-constructed literature review places the proposed research in the context of extant literature, and it identifies how the proposed research will create and enhance existing knowledge.
 - Writing a literature review can be intimidating, but with the appropriate skills, and a clear set of steps toward that end, anyone can write an excellent literature review.
 - Sources used to construct a literature review, known as original sources or as primary sources, primarily come in the form of peer-reviewed journal articles, including empirical pieces, theoretical pieces, and review pieces. In addition, local and federal governmental reports, conference papers, and information from conference presentations are useful sources.
 - Recent years have seen a proliferation of predatory publishers and predatory journals that are inappropriate sources for writing an academic literature review. Predatory publishers and journals are illegitimate entities that extort fees from unsuspecting authors.
 - Searching for original or primary sources is easily accomplished using search tools, terms, phrases, Boolean operators, and filters. Searching is an iterative process that should begin with the narrowest search.
- In addition, searches commonly should be restricted to journal articles published in the last five to seven years.
- Empirical journal articles are published using predictable sections making finding important information easy. Those sections include an abstract, introduction, literature review, the method, findings, discussion, and conclusion. All academic journal articles include references with full citation information.
 - Summarizing each primary source and then disaggregating statements from the summaries into a summary table where main themes are identified and stated are important steps toward creating a thematically based literature review.
 - Prior to writing the first rough draft, it is important that the writer identify which organizational approach taken (descriptive or chronological) and be familiar with the writing strategy identified as MEAL. By using MEAL, one offers a main point, evidence, analysis, and linkage across the literature review, as well as within each subsection.
 - Two primary ethical concerns while writing a literature review are plagiarism and misrepresentation/unfair criticism of others' work. Plagiarism comes in many forms, but all have in common that a writer has passed off another person's work as his or her own without crediting the originator of that material. In a literature review, the work is being critiqued, not the researcher. Should a person level criticism about extant research, it is his or her duty to ensure it is fair criticism given the context and available tools at the time the work was conducted.

REVIEW QUESTIONS

1. What are the purposes of a literature review?
2. What are the nine basic steps in writing a literature review? Why are they important?
3. What are appropriate and inappropriate sources for use in writing a literature review?
4. What are predatory publishers and journals, and how can you know they are not using one?
5. What are Boolean operators and filters, and why are they useful?

6. What questions should you address when summarizing an original source?
7. What is a main point, and how is one developed? What role does a main point play in the construction of a literature review?
8. What is the anatomy of an empirical research journal article, and what information does each section offer?
9. What types of organizational approaches are useful in writing a literature review? What is MEAL, and why is it important?
10. What are the two types of plagiarism discussed in this chapter, and why are they unethical?

CRITICAL THINKING QUESTIONS

1. Another student in your class is working on a literature review on sexual violence. He finds some literature in a journal but feels it does not cover the topic well. He decides to include information found in an article published in *Playboy* magazine because he argues it is a better source for this topic. How would you advise him to proceed? Why would you suggest that? (This is based on an actual incident.)
2. A student in your class notes she has completed her literature review on police use of force. She asks you to proofread her paper prior to turning it in because it is worth 75% of her course grade. She wants to do well. When you read it, you notice that the literature review offers a series of paragraphs summarizing individual pieces of research. What would you advise her to do, and why?
3. You are working on a literature review and realize that you could use much of a paper you turned in to another professor in a different class last semester. Would it be ethical to copy and paste those sections out of the old paper and place them into the new paper? Why or why not? Would plagiarism software find this? What is the best way to handle a situation like this?
4. You are writing a literature review, and it turns out one of the articles you are reviewing was written by a professor you had at your previous college. Since you worked closely with him, you know he often cuts corners and holds some dated views of particular groups. In the review, you write, "It is no surprise Dr. Lazyguy failed to consider the role of race in the analysis given his personal beliefs about particular groups." Is this an appropriate or wise approach? Why or why not? What would be a better way to handle this?
5. You go home to discover someone has broken in and stolen artwork you created. Although your artwork may not be worth millions, it is yours and you worked very hard creating it. In addition, it represents a lifetime of your labor with art. A few weeks later, you are walking downtown and in a window is your artwork for sale. On the accompanying information sheet, it notes the art was created by someone else. How would this make you feel? Do you believe that plagiarism is the same type of theft and fraud? Why or why not? What punishment should be given the art thief? How would you punish a plagiarizer if you had that power?



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