Literature Reviews

Literature reviews are important documents that help people collectively understand the similarities and differences among many research studies that explore similar topics. To write a cohesive literature review, understanding the similarities, differences, strengths, weaknesses, and gaps in research is necessary. While writing a literature review may seem overwhelming at first, approaching the assignment in multiple stages can help reduce your stress level and improve your understanding of how to write a literature review. This handout will focus on the stages of writing a literature review: researching, grouping, and synthesizing information.

Beginning Your Research

Thoroughly researching your topic is a critical first step when writing a literature review. Research studies are usually published as peer-reviewed journal articles. Because these articles are primary sources, they are typically not available to the general public. However, if you are a university student, you are likely to have access to free peer-reviewed journal articles through the online databases provided by your university library. Below are a few tips about how you can begin researching your topic:

- Peer-reviewed journal articles can be found in online databases. (If you’re an SJSU student, find more information in the MLK Library online database: http://libguides.sjsu.edu/az.php.)
- Begin your search using general terms (e.g., “autism”). By doing so, you can look at all the research published about your topic.
- After picking an umbrella topic, narrow your keyword searches. The more specific your research topic, the more focused your literature review will be.
  - Examples of keywords: peer-model intervention, social skills
  - Revised/narrowed topic: Peer-Model Intervention: Improving Social Skills of Children with Autism and Promoting a Tolerant Classroom Atmosphere
- Before finalizing your topic, make sure there is adequate supporting research. If there are few articles related to your topic, you may have difficulty gathering enough sources to compare, contrast, and evaluate. Remember, a literature review comprehensively evaluates the body of knowledge of a given topic.
- It will be helpful to jot down notes as you read each peer-reviewed journal article. The next step is to group your articles.
Grouping Information
You have a topic and have just finished reading the peer-reviewed journal articles that you are going to synthesize in your paper. (A good general rule of thumb is to synthesize at least 12 sources in a literature review.) What’s next? Look at the notes you’ve made and begin grouping the articles. Consider these questions when grouping information:

- What was the purpose of the study?
- What were the conclusions of the study?
- What methodologies did the researchers use to collect data?
- Were some methods more valid than others? Why?
- Did the researchers support the purpose of their study with sufficient data/evidence?
- What was the sample size of the study?
- Were there limitations of the study?

Finding the connections among articles is not always clear cut and might require you to read an article multiple times. After grouping the information, begin to think about smaller umbrella themes that encompass each subset of articles. Each theme should relate back to your thesis statement, the purpose of your literature review.

Organizing Subthemes in Your Paper
Notice in the above example about autism that the topic was narrowed down from autism spectrum disorder to a specific focus pertaining to autism spectrum disorder: the effect that peer-model inclusion interventions have on improving the social skills of elementary school students with high-functioning autism. Notice, also, how the student further narrowed the topic to a specific age group.

When creating smaller umbrella themes, refer back to your thesis statement. What is the central argument or focus of your paper? Next, think about what information you would need to present to readers for them to understand fully the scope of your topic. As a writer, it is your responsibility to organize information in a logical manner. In APA formatting, one way to organize information logically is by using **bolded** subheadings. Each subheading should build on the next.

Now, let’s look at the sample thesis and possible subheadings below.

**Thesis:** Elementary school students with moderate to high-functioning autism spectrum disorder (ASD) can improve their social skills through participating in peer-model inclusion interventions, rather than the paraprofessional model, that can help promote inclusivity and tolerance within classrooms; however, more research needs to be done regarding the emotional and psychological effects this intervention has on participants (McCurdy & Cole, 2014).

**Subheadings:**
- **Understanding Why Intervention Is Needed**
- **Facilitating the Right Sort of Interaction**
● Comparing the Peer Model and Paraprofessional Model
● Building Relationships with Other Children
● Recognizing Other Settings for Peer-Model Intervention

**Synthesizing vs. Summarizing Information**

Synthesizing and summarizing information are two different ways of presenting knowledge to readers. In a literature review, you will primarily synthesize research rather than summarize it. **Synthesizing** information involves finding connections and relationships among many research articles while **summarizing** information involves recapping the main points about a single article. A literature review will include some background information about the topic and a brief summary about the purpose and methods of each article. **However, the bulk of your paper should synthesize your research.** Synthesizing research shows an awareness of how research from different articles can be intertwined. Furthermore, writers can synthesize information by comparing and contrasting findings from different researchers.

**Activity 1**

Consider whether your would synthesize or summarize the following information.

1. Background information
2. Purpose and method of study
3. Subsection comparing the peer-model method and paraprofessional model

**Answer Key 1**

1. **Summarize** the current topic you are researching. Include main points about the history of your topic to help readers understand the context and significance of your argument, which should be addressed in your thesis. Background information can come from multiple sources and should be included in your introduction or in a subsection.

2. **Summarize** the main purpose of each study and how researchers collected data. Summaries of relevant studies can be included in the different subsections of your paper.

3. **Synthesize** research by making connections among different research articles. Consider the following questions: Did researchers make similar conclusions? Were their methods to gather data similar or different? Could data be skewed due to a small sample size?

**Tips for Synthesizing Information**

● Vary in-text citation usages. Here, again, we are using APA format.
   ○ In-text citations (embed the author’s last name and year of publication in text)
     ■ Lam (2011) concluded that today more children prefer to play games on electronic devices than in person with others.
   ○ Parenthetical citations (include the author’s last name and year of publication in parentheses)
Today, more children prefer to play games on electronic devices rather than in person with others (Lam, 2011).

- Use transitions to show relationships between ideas. Some common transitional words and phrases include furthermore, in addition, on the other hand, likewise, and in contrast.
- Synthesize information by citing multiple authors in the same parenthetical citation. The authors’ last names should be alphabetized and separated by a semicolon. Citing multiple authors in the same parentheses indicates that all the authors included in the citation made similar conclusions about a specific issue.
  - Several studies (Lai & Blankenship, 2017; Mally, 2014) indicated that grade school children who stay indoors all day playing games on their smartphones may be at a higher risk of experiencing motor development delays.
- Keep grouped information together. This will keep each subsection focused and will make it easier for you to find relationships (similarities, differences, limitations) among different studies rather than trying to find a single relationship among the articles collectively.
- All first in-text citations must include all authors’ last names. In subsequent citations, use et al. Please refer to the Publication Manual of the American Psychological Association for more information.

Activity 2
This activity examines a literature review that focuses on what pizza lovers from the Bay Area consider when deciding where to eat. The underlined sentence from the literature review needs to be revised. Read the underlined sentence, and brainstorm how you would revise the sentence. (Hint: Remember that literature reviews synthesize information.)

With an increasing number of independent pizza restaurants opening in San Francisco, researchers wanted to understand what drives customers to pick one pizza restaurant over another. Alexander (2017) interviewed 275 pizza enthusiasts, asking them questions about what they consider when choosing a new pizza restaurant. In addition, Hager (2015) interviewed ten people attending the annual pizza convention in San Francisco. Alexander (2017) found that the quality of pizza and variety of toppings are the most important factors that convince people to eat at a pizza restaurant. On the other hand, Hager (2015) concluded that the affordability of a slice of pizza is the determinant of whether a consumer will eat at a pizza restaurant. However, due to the small sample size, Hager’s (2015) data may be skewed. In addition, both researchers wanted to find out how first-time customers determine the reputation of a restaurant. Alexander (2017) concluded that word of mouth and ratings and reviews on websites, such as Yelp, are the most important. Hager (2015) also found that recommendations by word of mouth and online ratings and reviews are important factors.

Answer Key 2
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people attending the annual pizza convention in San Francisco. Through qualitative research, both researchers concluded that different factors influence a person’s decision to eat at a pizza restaurant. Alexander (2017) found that the quality of pizza and variety of toppings are the most important factors that convince people to eat at a pizza restaurant. On the other hand, Hager (2015) concluded that the affordability of a slice of pizza is the determinant of whether a consumer will eat at a pizza restaurant. However, due to the small sample size, Hager’s (2015) data may be skewed. To understand what draws first-time customers to a restaurant, the researchers also asked consumers about how they find out about pizza restaurants. The reputation of a restaurant, which is determined by word of mouth and ratings and reviews from websites, such as Yelp, greatly influences a customer’s decision to eat at a pizza restaurant (Alexander, 2017; Hager, 2015).

References