Galvan (2013)

Chapter 8

Synthesizing Literature Prior to Writing a Review

At this point, you should have read and analyzed a collection of research articles and prepared detailed notes, possibly including summary tables (see Chapter 7). You should now begin to synthesize these notes and tabled materials into a new whole, the sum of which will become your literature review. In other words, you are now ready to begin the process of *writing* a literature review. This chapter will help you to develop an important product: a detailed writing outline.

✓ Guideline 1: Consider your purpose and voice before beginning to write.

Begin by asking yourself what your purpose is in writing a literature review. Are you trying to convince your professor that you have expended sufficient effort in preparing a term paper for your class? Are you trying to demonstrate your command of a field of study in a thesis or dissertation? Or is your purpose to establish a context for a study you hope will be published in a journal? Each of these scenarios will result in a different type of final product, in part because of the differences in the writer's purpose, but also because of differences in readers' expectations. Review the descriptions of three types of literature reviews in Chapter 2.

After you establish your purpose and have considered your audience, decide on an appropriate *voice* (or style of writing) for your manuscript. A writer's voice in a literature review should be formal because that is what the academic context dictates. The traditional voice in scientific writing requires that the writer de-emphasize himself or herself in order to focus readers' attention on the content. In Example 8.1.1, the writer's *self* is too much in evidence. It distracts the reader from the content of the statement. Example 8.1.2 is superior because it focuses on the content.

Example 8.1.1¹

Improper voice for academic writing:

In this review, I will show that groups are often indispensable to many important life activities and have the potential for enhancing performance and productivity. However, I believe this potential is seldom fully realized. One well-documented limitation of groups I observed in the literature is the tendency for individuals to exert less effort when working in a group than when working individually, a phenomenon known as social loafing (Latané, Williams, & Harkins, 1979).

¹ This is a hypothetical example based on Example 8.1.2.

Example 8.1.2²

Suitable voice for academic writing:

Groups are often indispensable to many important life activities and have the potential for enhancing performance and productivity. However, this potential is seldom fully realized. One well-documented limitation of groups is the tendency for individuals to exert less effort when working in a group than when working individually, a phenomenon known as social loafing (Latané, Williams, & Harkins, 1979).

Notice that academic writers tend to avoid using the first person. Instead, they let the material, including statistics and theories, speak for itself. This is not to say that the first person should never be used. However, it is traditional to use it exceedingly sparingly.

✓ Guideline 2: Consider how to reassemble your notes.

Now that you have established the purpose for writing your review, identified your audience, and established your voice, you should reevaluate your notes to determine how the pieces you have described will be reassembled. At the outset, you should recognize that it is almost always unacceptable in writing a literature review to present only a series of annotations of research studies. In essence, that would be like describing individual trees when you really should be describing the forest. In a literature review, you are creating a unique new forest, which you will build by using the trees you found in the literature you read. In order to build this new whole, you should consider how the pieces relate to one another while preparing a topic outline, which is described in more detail in the next guideline.

✓ Guideline 3: Create a topic outline that traces your argument.

Like any other kind of essay, the review should *first* establish for the reader the line of argumentation you will follow (this is called the *thesis*). This can be stated in the form of an assertion, a contention, or a proposition. *Then*, you should develop a traceable narrative that demonstrates that the line of argumentation is worthwhile and justified. This means that you should have formed judgments about the topic based on the analysis and synthesis of the literature you are reviewing.

The topic outline should be designed as a road map of the argument, which is illustrated in Example 8.3.1. Notice that it starts with an assertion (that there is a severe shortage of donor organs, which will be substantiated with statistics, and that the review will be delimited to the psychological components of the decision to donate). This introduction is followed by a systematic review of the relevant areas of the research literature (points II and III in the outline), followed by a discussion of methodological issues in the relevant research (point IV). It ends with a summary, implications, and a discussion of suggestions for future research and conclusions that refer back to the introduction (point I).

² Smrt, D. L., & Karau, S. J. (2011). Protestant work ethic moderates social loafing. *Group Dynamics: Theory, Research, and Practice*, 15, 267–274.

& Farrington, 2008a; Myers et al., 1999; Nijnatten, 1998) as well as edited books on children of incarcerated parents (Eddy & Poehlmann, 2010; K. Gabel & Johnston, 1995; Harris & Miller, 2002; Harris, Graham, & Carpenter, 2010; Shaw, 1992b; Travis & Waul, 2003). Third, experts in the field were contacted to request information about any other studies that we might not have located. The first group of experts contacted consisted of about 65 researchers and practitioners who we knew were professionals with an interest in children with incarcerated parents. The second group consisted of about 30 directors of major longitudinal studies in criminology....

✓ Guideline 11: Avoid long lists of nonspecific references.

In academic writing, references are used in the text of a written document for at least two purposes. First, they are used to give proper credit to an author of an idea or, in the case of a direct quotation, of a specific set of words. A failure to do so would constitute plagiarism. Second, references are used to demonstrate the breadth of coverage given in a manuscript. In an introductory paragraph, for instance, it may be desirable to include references to several key studies that will be discussed in more detail in the body of the review. However, it is inadvisable to use long lists of references that do not specifically relate to the point being expressed. For instance, in Example 9.11.1, the long list of non-specific references in the first sentence is probably inappropriate. Are these all empirical studies? Do they report their authors' speculations on the issue? Are some of the references more important than others? It would have been better for the authors to refer the reader to a few key studies, which themselves would contain references to additional examples of research in that particular area, as illustrated in Example 9.11.2.

Example 9.11.1

First sentence in a literature review (too many nonspecific references):

Numerous writers have indicated that children in single-parent households are at greater risk for academic underachievement than children from two-parent households (Adams, 2012; Block, 2011; Doe, 2011; Edgar, 2012; Hampton, 2009; Jones, 2012; Klinger, 2008; Long, 2011; Livingston, 2010; Macy, 2011; Norton, 2012; Pearl, 2012; Smith, 2009; Travers, 2010; Vincent, 2011; West, 2008; Westerly, 2009; Yardley, 2011).

Example 9.11.2

An improved version of Example 9.11.1:

Numerous writers have suggested that children in single-parent households are at greater risk for academic underachievement than children from two-parent households (e.g., see Adams, 2012, and Block, 2011). Three recent studies have provided strong empirical support for this contention (Doe, 2011; Edgar, 2012; Jones, 2012). Of these, the study by Jones (2012) is the strongest, employing a national sample with rigorous controls for....

Notice the use of "e.g., see...," which indicates that only some of the possible references are cited for the point that the writers have suggested. You may also use the Latin abbreviation *cf.* (which means *compare*).

✓ Guideline 12: If the results of previous studies are inconsistent or widely varying, cite them separately.

It is not uncommon for studies on the same topic to produce inconsistent or widely varying results. If so, it is important to cite the studies separately in order for the reader to interpret your review correctly. The following two examples illustrate the potential problem. Example 9.12.1 is misleading because it fails to note that the previous studies are grouped according to the two extremes of the percentage range given. Example 9.12.2 illustrates a better way to cite inconsistent findings.

Example 9.12.1

Inconsistent results cited as a single finding (undesirable):

In previous studies (Doe, 2011; Jones, 2012), parental support for requiring students to wear school uniforms in public schools varied considerably, ranging from only 19% to 52%.

Example 9.12.2

Improved version of Example 9.12.1:

In previous studies, parental support for requiring students to wear school uniforms has varied considerably. Support from rural parents varied from only 19% to 28% (Doe, 2011), while support from suburban parents varied from 35% to 52% (Jones, 2012).

✓ Guideline 13: Speculate on the reasons for inconsistent findings in previous research.

The authors of Example 9.13.1 speculate on inconsistent findings regarding shame about in-group moral failure.

Example 9.13.1¹¹

Speculation of inconsistent findings of previous research (desirable):

We think that the inconsistent findings regarding shame about in-group moral failure may result from the rather broad conceptualization of shame in past work. As Gausel and Leach (2011) recently pointed out, different studies of shame have conceptualized the emotion as involving quite different combinations of appraisal and feeling. Some previous work conceptualizes shame as a combination of the appraisal of *concern for condemnation* and an attendant *feeling of rejection*. Most

¹¹ Gausel, N., Leach, C. W., Vignoles, V. L., & Brown, R. (2012). Defend or repair? Explaining responses to in-group moral failure by disentangling feelings of shame, rejection, and inferiority. *Journal of Personality and Social Psychology*, 102, 941–960.

✓ Guideline 11: Check your draft for common writing conventions.

There are a number of additional writing conventions that all academic disciplines require. Check your draft to ensure you have applied all the following items before you give it to your instructor to read.

- a. Make sure you have used complete sentences.
- b. It is sometimes acceptable to write a literature review in the first person. However, you should avoid excessive use of the first person.
- c. It is inappropriate to use sexist language in academic writing. For instance, it is incorrect to always use masculine or feminine pronouns (he, him, his vs. she, her, hers) to refer to a person when you are not sure of the person's gender (as in, "the teacher left her classroom...," when the teacher's gender is not known). Often, sexist language can be avoided through use of the plural form ("the teachers left their classrooms..."). If you must use singular forms, alternate between masculine and feminine forms or use he or she.
- d. You should strive for clarity in your writing. Thus, you should avoid indirect sentence constructions, such as, "In Smith's study, it was found...." An improved version would be, "Smith found that...."
- e. In general, the numbers zero through nine are spelled out, but numbers 10 and above are written as numerals. Two exceptions to this rule are numbers assigned to a table or figure and measurements expressed in decimals or in metric units.
- f. Always capitalize nouns followed by numerals or letters when they denote a specific place in a numbered series. For instance, this is Item f under Guideline 11 in Chapter 11. (Note that *I*, *G*, and *C* are capped.)
- g. Always spell out a number when it is the first word or phrase in a sentence, as in, "Seventy-five participants were interviewed...." Sometimes a sentence can be rewritten so that the number is not at the beginning, as in "Researchers interviewed 75 participants...."

✓ Guideline 12: Write a concise and descriptive title for the review.

The title of a literature review should identify the field of study you have investigated as well as tell the reader your point of view. However, it should also be concise and describe what you have written. In general, the title should not draw attention to itself. Rather, it should help the reader to adopt a proper frame of reference with which to read your paper. The following suggestions will help you to avoid some common problems with titles.

- a. Identify the field but do not describe it fully. Especially with long and complex reviews, it is not advisable that you try to describe every aspect of your argument. If you do, the result will be an excessively long and detailed title. Your title should provide your reader with an easy entry into your paper. It should not force the reader to pause in order to decipher it.
- b. Consider specifying your bias, orientation, or delimitations. If your review is written with an identifiable bias, orientation, or delimitation, it may be desirable to specify it in the title. For instance, if you are critical of some aspect of the literature, consider using a phrase such as, A Critique of... or A Critical Evaluation

- f. Identify yourself as the author, and include a telephone number or e-mail address. Because your draft is one of many papers your instructor will read, it is important to identify yourself as the author. Always include a cover page with your name and a telephone number or e-mail address in case your professor wants to contact you. If you are writing the literature review as a term paper, be sure to indicate the course number and title as well as the date.
- g. Make sure the draft is printed clearly. In general, you should avoid using printers with ribbons unless you make sure the print is dark enough to be read comfortably. Similarly, if you submit a photocopy of your draft, make sure the copy is dark enough. Always keep a hard copy for your records! Student papers sometimes get misplaced, and hard drives on computers sometimes crash.
- h. Avoid "cute" touches. In general, you should avoid using color text for high-lighted words (use italics instead), mixing different size fonts (use a uniform font size throughout except for the title), or using clip art or any other special touches that may distract the reader by calling attention to the physical appearance of your paper instead of its content.

✓ Guideline 14: Use great care to avoid plagiarism.

If you are uncertain about what constitutes plagiarism, consult your university's student code of conduct. It is usually part of your university's main catalog and is reprinted in several other sources that are readily available to students. For instance, the University of Washington's Psychology Writing Center provides a writing guide titled Academic Responsibility (http://web.psych.washington.edu/writingcenter/). On the main page, click the "Writing Guides" link, which will take you to a list of handouts in PDF format. Under the "Avoiding Plagiarism" heading, you will find a statement on academic responsibility prepared by the university's Committee on Academic Conduct (1994), which discusses six types of plagiarism.

- (1) Using another writer's words without proper citation;
- (2) using another writer's ideas without proper citation;
- (3) citing a source but reproducing the exact words of a printed source without quotation marks;
- (4) borrowing the structure of another author's phrases or sentences without crediting the author from whom it came;
- (5) borrowing all or part of another student's paper or using someone else's outline to write your own paper; and
- (6) using a paper-writing service or having a friend write the paper for you.

It is easy to quarrel about whether borrowing even one or two words would constitute plagiarism or whether an idea is really owned by an author. However, plagiarism is easily avoided simply by making sure that you cite your sources properly. If you have any doubt about this issue with respect to your own writing, ask your instructor. Plagiarism is a very serious matter.

¹ Committee on Academic Conduct. (1994). Bachelor's degree handbook. University of Washington.