# Southwestern University

# Guide for Writing in Psychology

#### About Writing in Psychology

Regardless of the type of writing they do (e.g., empirical journal articles, literature review articles, grant proposals, book chapters, books), psychologists—like other scientific writers—strive to be precise, clear, and concise in conveying their ideas. Psychological writers try to tell a good story (one that has a point, and one that always makes a unique contribution to the literature in psychology) in a way that a layperson (even one without expertise in psychology) can understand. A good rule of thumb for psychology students is to write a paper that is so clear your grandma could understand it. Good scientific writing sounds professional and formal without being overly technical or flowery; it also rarely uses direct quotations—other

researchers' findings and arguments are always paraphrased in clear, simple language. Unlike some other disciplines but common to all scientific writing, personal opinions are rare in psychological writing; instead, arguments and facts are presented that are supported by scholarly evidence (e.g., research studies).

Although writing in psychology can seem daunting at first, there is a very specific formula, or "recipe," for the process. If you follow this recipe carefully, use the "template" (i.e., exemplar) phrases that expert psychology writers use, and if you practice, practice, and practice some more (almost all writers get better with subsequent papers), you will be a skilled psychological writer in no time!

By Dr. Traci Giuliano

# About this guide

This guide contains the following sections:

- About Writing in Psychology
- Common Assignments
- Writing a Literature Review
- Writing a Research Report
- Writing a Journal Critique
- Evidence in Psychology
- Citation in Psychology
- Conventions & Formatting in Psychology Writing
- A Few Other Tips

#### **Suggested Further Readings**

American Psychological Association. (2001). Publication manual of the American Psychological Association (5th ed.). Washington, DC: APA.

Bem, D. J. (2003). Writing the empirical journal article. In J. Darley, M. Zanna, & H. Roediger, III (Eds.), The Compleat Academic: A Career Guide (2nd ed., pp. 185-219). Washington, DC: American Psychological Association.

The Disciplinary Writing Guides are designed to provide an introduction to the conventions, or rules, of writing in different subjects. These guides have been designed by Southwestern professors to help you understand what will be expected of you in your classes.

#### Common Assignments

The most common types of written assignments in psychology courses include literature reviews, research reports, and journal critiques, although application papers will sometimes be assigned as well. Application papers are usually short papers that require students to apply course concepts to personal experiences. Although these papers are often less formal than research reports (e.g., they typically don't contain a title page), they must contain proper citation in APA style in order to credit psychological researchers for their ideas as well as to avoid plagiarism.

#### Writing a Literature Review

Most students think that a literature review is an objective summary of all the literature on a particular topic, and that they can simply gather articles, read them, and then summarize the findings of one article after another until they are finished. However, a good literature review is much more than that, and must do two things: (1) it must make a novel contribution (i.e., you must have a thesis, or point that you are trying to make, and then organize and frame your lit review around that point) and (2) you must evaluate the research (rather than simply describing and summarizing, you must judge the research based on its scientific merits).

Your thesis (or primary argument) may not materialize until after you've read the literature, but that's okay. Some ways to make a unique contribution in a literature review include (a) highlighting a controversy (e.g., comparing and contrasting competing theories and making an evaluative judgment about which side has better evidence), (b) critiquing a current theory and providing a new framework that better explains the research in a given area, (c) bringing research on a different topic that sheds light on the current topic (e.g., relating two different topics to show how the research is similar and can be unified or can inform a third topic), or (d) pointing out significant gaps in data or understanding in a topic and making suggestions for future research and theory development in the area.

In evaluating the literature as a whole, focus on identifying relationships among theories or studies, contradictions among studies, and/or identifying gaps in the literature; in evaluating individual studies, focus on the methodology (e.g., is the sample size adequate? Was there an experimental confound? Are the results generalizable?), data analysis, and/or author's conclusions (e.g., are the conclusions justified? Do they follow from the data?).

Some helpful tips: **Choose your topic carefully**. Choose a current topic, one that is well researched, and one in which you are personally interested (you'll be spending a lot of time working on it, and you'll be more motivated if you like the topic). **Start early**, because if it turns out that your topic won't make a good paper (e.g., there's too little research, or you can't think of a thesis), then you'll need to have time to change topics. **Remember, a good lit review is provocative and interesting**—it raises questions about the literature, offers interesting 'take home' points, and also makes suggestions for future work on the topic.

More information about literature reviews is available at A.T. Still Research Institute's "Review Article Guidelines for Students on Rotation."

#### Writing a Research Report

In some classes, such as research methods and capstone, you will write an empirical research report based on research you and/or your classmates have conducted. In other classes, you may be asked to write a research proposal, in which you propose, but do not actually conduct, a study. The steps are generally the same, but a research proposal (a) will be written in future tense rather than in past tense and (b) will either end after the method section, or (depending on what your professor requires) will contain a modified results and discussion section with predicted results and anticipated implications/conclusions if the results are as predicted. A research report can best be thought of as an "hourglass," in which the paper starts broadly (by introducing the topic and previous research), gets more and more narrow (describing the current study and its results), and then ends broadly (describing conclusions and practical implications of the study). A **research report** contains six sections:

- 1. **Abstract**. This concise (150-250 words) summary consists of a single paragraph (no indent) under the heading "Abstract" (not bold) on the second page of the paper (after the title page). Because it summarizes the entire paper, it is easiest to write last. Abstracts are very formulaic, so be sure to follow examples and the APA manual.
- 2. **Introduction**. The introduction (no heading; the paper title is used the top of the introduction) starts on the third page. The introduction is like a funnel (representing the top half of the hourglass, the introduction moves from broad to narrow) that contains three sections. (1) The opener grabs the reader's attention and introduces the topic of interest. (2) The literature review provides a theoretical context for your study and sets the stage by pointing out gaps in previous research. (3) The closing describes the purpose of your study, briefly highlighting the methods, and ends with your hypotheses, including a rationale for each.
- 3. **Method**. The method section follows the introduction (under the bold heading "Method") and describes the methods used to conduct the study in detailed terms (so detailed that another person could replicate the study exactly). It contains four subsections: (1) Participants (e.g., number, gender, source, setting, sampling method, motivation), (2) Design (correlational, experimental, etc.), (3) Materials/Measures (which describes all materials and variables in the study), and (4) Procedure (a step-by-step descriptive account of how the study unfolded for participants).
- 4. **Results**. The results section follows the method section (under the bold heading "Results") and summarizes the statistical treatment of the data. This section specifies the type of analysis used, reports a general statement of the results, along with a statistical statement supporting each result, and refers readers to tables or figures.
- 5. **Discussion**. The discussion section follows the Results (under the bold heading "Discussion"); it is like an upside down funnel (going from narrow to broad, mirroring the introduction) and gives the "big picture" and "take home points" of your research. This section usually contains four sections: (1) A restatement of the results (linking them to previous theory and findings), (2) An acknowledgement of the limitations of your study (*note that this is not always required. In some subfields, such as neuroscience, it is not common practice to acknowledge limitations in advance*), (3) A discussion of the practical (real-world) applications of your findings and suggestions for future research, and (4) A closing (it is best if the ending ties back into your broad opener to the topic).

6. **References**. This section begins on a new page after the Discussion (under the non-bold heading "References"); it must follow APA rules exactly (see below for guidelines and examples).

#### Writing a Journal Critique

Scientific articles are peer-reviewed. In some classes, students are required to critique their peers' writing or a previously published journal article as if they were undergoing the scientific peer-review process. There are four key elements of a well-written journal critique.

**First**, you summarize key components of the article. You must include information about the rationale for the study, the methods used to address the research question, the results obtained, and the implications of the findings.

**Second**, you identify and describe any weaknesses in the theoretical foundation of the article, weaknesses in the methodological approach to addressing the research question, as well as any weaknesses in the results obtained.

**Third**, you identify and describe any strengths in the methodology, the results and the interpretation of the results in the discussion.

**Finally**, you identify and describe any major impact the study could have on society, scientific literature, or future scientific inquiry.

## Evidence in Psychology Writing

Regardless of the type of writing you are doing, good preparation is essential. Here are three steps to help you use evidence in your writing.

## Understand the sources used in psychology.

Psychology papers rely almost exclusively on "scholarly" sources (i.e., articles published in peer-reviewed journals with names like *Sex Roles* and *Journal of Personality* and/or books written by scholars in the field). So concentrate your lit search on these sources rather than on "popular" sources such as magazines, newspapers, and websites (never use a dictionary, Wikipedia, or textbook as a source, even for a definition of a

term; instead, take your definition from experts in the field as written in a scholarly article or book). The best sources (these should be the most common in your paper) are empirical journal articles, which are first-hand reports that describe research studies that the authors themselves conducted (these articles will have methods, results, and discussion sections). Scholarly books, edited books (with chapters written by different experts on the same topic), and review articles (these are lit reviews published in peer-reviewed journals) can make great starting points for understanding a topic (and for finding other empirical articles to read and cite), but they should not

comprise the bulk of your sources.

#### Conduct a thorough literature search.

Instead of Googling your topic (which will bring up a wide range of uncredible, non-scholarly sources), always use a reliable search engine (PsycInfo should always be your go-to source, but you can also do extra searching on Academic Search Complete or Google Scholar; for neuroscience papers, PUBMED is preferred). Start your lit search ASAP, preferably right when you get the paper assignment. A common mistake is that students wait too long to start their search (e.g., a few days before the paper is due), and there simply isn't time to get the

articles (those ordered on Inter Library Loan, or "Get It," can take several days to a week to obtain) and/or read them before outlining and writing the paper. In addition to empirical journal articles, look for fairly recent lit review articles or books that you can skim to get a basic understanding of the research in an area and especially to find excellent sources (including empirical journal articles) from their reference sections to read and cite in your paper.

#### Take good notes.

Never skim or read articles without taking notes and assume that you will remember what was said in a given article later; you won't remember, and you might also accidentally commit plagiarism. Instead, be sure to highlight important sections and take notes in the margins for each article you read. Once you've read and highlighted an article, open a file on your computer and type up notes on the article, including its complete reference in APA style (which you'll need for the reference section anyway); bullet points that summarize the purpose, method, results, and conclusion; and why you think this article is important for your paper and where it will fit (e.g., "good for the introduction because it's a study with similar findings," "good for the discussion section because it's a

suggestion for future research").

**IMPORTANT:** (1) Never write down (or cut and paste) information from an article verbatim (even if you use quotes); always paraphrase in your own words from the very beginning, which will make it easier to write your paper (and help you avoid plagiarism; sometimes students accidentally write down words too close to the article if they are working from a quote rather than their paraphrase). (2) Never cite an article based on reading the abstract alone (it is scientifically unethical and a violation of the honor code); be sure to read the entire article for any article cited in your paper.

#### Citation in Psychology

**Citations in Psychology are in APA Style.** You can find out more about the conventions of APA style, including links to guidelines and models, in the "Student Resources" section of the Debby Ellis Writing Center website.

**Journal Article** Affleck, G., Tennen, H., Croog, S., & Levine, S. (1987). Causal attribution, perceived benefits, and morbidity after a heart attack: An 8-year study. *Journal of Consulting and Clinical Psychology*, 55, 29-35.

Chapter in an Edited Book

Duncan, M. C., Messner, M. A., Williams, L., & Jensen, K. (1994). Gender stereotyping in televised sports. In S. Birrell & C. L. Cole (Eds.), Women, sport, and culture (pp. 249-272). Champaign, IL: Human Kinetics

Newspaper
Article
DuPree, D. (1978, February 8). Country, city worlds apart in basketball. *The Washington Post*, pp. E1, E6.

**Magazine Article** Ellis, R. L. (2000, September 11). Bringing people back from the dead. *Time*, 219, 57-59.

Website Krystek, L. I. (1996). Nessie of Loch Ness. Retrieved September 5, 2006, from http://www.unmuseum.mus.pa.us/lochness.htm.

**Conference**Presentation
Turner, K. L., Giuliano, T. A., Lundquist, J. C., & Knight, J. L. (2003). *Twice as nice: The double burden of contemporary female athletes.* Poster presented at the 18<sup>th</sup> annual meeting of the American Psychological Society, Atlanta.

**Book** Wexler, A. (1995). Mapping fate: A memoir of family, risk, and genetic research. New York: Times Books.

## Style & Formatting in Psychology



Use words that imply argument rather than conversation (don't say "the authors state/say/believe")

- Making a claim: Smith (1994) argues, asserts, claims, contends, emphasizes, suggests, concludes.
- Reporting a finding: The results found, revealed, reported, showed, indicate, suggest.
- Consistent findings: These results corroborate, confirm, support, verify, substantiate, are consistent with.
- **Inconsistent findings:** The findings refute, contradict, call into question, are contrary to.

Use "template" phrases (i.e., common phrases that good writers use in various situations) to convey your ideas. (This is not plagiarism, but a way for beginning writers to learn the "basic moves" used by expert writers.)

- Introducing standard views: Conventional wisdom
  has it that \_\_\_\_\_; Historically, it has been assumed
  that...
- **Introducing a controversial issue:** Twenty years ago, the notion that \_\_\_\_ seemed preposterous; within the past few years, however, several researchers (cite) have shown that...
- **Describing a theory:** Taylor (1999), in her \_\_\_\_\_ theory, argued that \_\_\_\_\_; According to Smith (2010), people...
- Challenging a theory: A major weakness of this idea is that \_\_\_\_\_; These findings are at odds with those of Hu (1994); Although it is true that X, it does not necessarily follow that Y...; Other criticisms of this theory...
- Mixed evidence: Although other research supports
   San's (2004) point that X, his conclusion is
   questionable; The evidence supporting Hu's (2001)
   theory is mixed. On the one hand \_\_\_\_\_; on the other
   hand
- **Discussing a gap in the literature:** At present, research has yet to establish whether X is true; Relatively little empirical research has been devoted to Y; The scant research to date suggests that...

- Synthesizing the literature: Together, such studies suggest...; Emerging research has established that...; A growing body of research suggests...; In short, the bulk of the evidence supports that...
- Making a claim (thesis): The premise of this paper is that...; The question then arises whether there is a similar pattern for...; To our knowledge, there is no empirical data to suggest...;The purpose of the current study was to examine...
- **Signaling your own idea (not others):** It could logically be assumed that...; Thus, it can be surmised that...; It seems plausible that...; One interpretation of these findings is that...
- Supporting your claim with evidence from others: Consistent with this notion, recent research (cite) confirms that...; Supporting this view is a study of X (cite)...; Indeed, research (cite) confirms that...
- Acknowledging limitations: (check with your professor to see if this is expected in your work)
   Although there is compelling evidence that X, some limitations must be acknowledged...;
   Until the issue of X is resolved, caution is advised in interpreting these results.
- Theoretical implications/Suggestions for future research: An important avenue for future research is to identify...; In terms of future research, it would be useful to extend the current findings by identifying...
- **Practical Implications:** Smith's (2005) findings have significant applications in the field of medicine; for example...; Our findings have important consequences for the broader domain of...
- Beginning of the closing paragraph: Clearly, much work remains to be done to develop a comprehensive understanding of X; in the meantime...; In short, the emerging body of evidence suggests X, and in doing so has enhanced our understanding of the relationship between a and b.

Use transition words and phrases at the start of sentences to avoid a "choppy" sound and to indicate the relationship between ideas.

- To clarify/explain: That is; In other words; In effect, In short
- To give an example: Specifically; For example; As one example; Indeed; In fact
- To make a concession: Admittedly; Of course; To be sure; Although it is true
- To emphasize a point: Interestingly; Surprisingly; Importantly
- To show cause/consequence: As such; As a result; Consequently; Therefore; Thus
- To show contrast: By contrast; However; Although,; Whereas; Despite; Nonetheless
- **Similarity/additional examples:** Similarly; In a similar vein; In addition; Moreover; Furthermore
- To summarize/conclude: In short; In sum; In essence; Overall; In conclusion; In general
- Sequence of events: First; Next; Then; Finally
- To relate to a hypothesis: Consistent with predictions; Contrary to predictions; As predicted

#### A Few Last Tips



use direct quotations. Although quotes are common in some disciplines (e.g., the humanities), they

are rare in scientific papers. Use quotes only for beautiful, exquisite prose that cannot be said another way. Paraphrase researchers' theories, arguments, and findings in your own words.

- **Don't use casual or informal language.** Never use *one* as a synonym for *people* (as in "one would imagine"), or the words *you*, *thing*, or *something*; avoid slang word and phrases ("24/7," "it's not black and white," "hookup").
- Don't use contractions. Contractions are not allowed in formal writing.
- **Don't use "flowery" or complex words.** Never use a thesaurus when writing psychology papers; always use the simpler of two words (e.g., *use* vs. *utilize*, *help* vs. *assist*), and avoid superlatives (*incredible*, *fantastic*, *amazing*).
- **Don't use unnecessary words.** Say *first* instead of "first of all," *specifically* instead of "more specifically," and omit words such as *really*, *actually*, *basically*.
- **Don't use biased language.** Use inclusive terms (humankind, he or she) rather than the generic masculine (mankind, he), and use "people-first" language: participants rather than subjects, "gay men and lesbians" rather than homosexuals, "older adults" vs. "the elderly," "patients with bipolar disorder" rather than "bipolar people."

Find good role models/exemplar papers. Sometimes your professor will provide you with a good example from a previous student, but if not, find your own excellent role model papers in the literature. (If you're writing a lit review, find example lit reviews; if you're writing an empirical research report, find example empirical journal articles). Find an article that you think is really clearly written and has good arguments, figure out what you like about it and what makes it clear, and then emulate that author (you might also read other papers by that author). For capstone papers, you will want to use published papers by your mentor.

Outline your paper before writing. Never ever sit down to write a paper without organizing your thoughts and writing down an outline first. (Organization doesn't "magically" happen; it must be created by the writer beforehand!) If you are writing a literature review, you'll want to sort the articles into the order you want to bring them up in your paper based on the argument you're making; do not just present the articles in chronological order. You'll also want to outline your paper's structure (i.e., how you will introduce the topic and your specific thesis; the ordering of articles, along with descriptions and evaluations of them; and your concluding thoughts and suggestions for the future). Consider using subheadings to organize your paper. If you are writing an empirical research report, you'll want to outline your introduction (introducing the topic, the order in which you want to present your articles, pointing out the gap in the literature that justifies your study, and your hypotheses) and discussion (generating ideas for your study's limitation, practical implications, and suggestions for future research) sections for sure, and possibly your method and results sections as well.