

## **Writing an APA-Style Empirical Paper**

### **Major Paper Sections**

**Title Page** – Include a title that summarizes the main question, point or finding of the paper. Also include the author's names and institutional affiliations, along with a note with the author's full departmental affiliations, any changes in affiliation, acknowledgements, and special circumstances. Also include contact information for the corresponding author (to whom questions concerning the paper should be directed when it is published).

- Tip – Write an interesting title if possible, but keep it professional and informative. Catchy titles are fine, but it is most important that titles are clear and informative. The title will be the first thing potential readers see and it is critical that it give the reader a good idea of what your paper is about.

**Abstract** – This paragraph summarizes the article for potential readers. It should very briefly explain the question you investigated, describe your sample, explain your research methods, give a description of your results with the appropriate statistics reported, explain your conclusions given your results, and note any applications or implications of your results.

- Tip – Many authors write the abstract after the rest of their article is fully written. However, if you think writing the abstract will help you outline your ideas in a concise, coherent way, consider drafting the abstract first and revising it again when the article is more complete.

**Introduction** – This section should include why your research problem is important and go over any particularly relevant background. It should also explain your clear and specific hypotheses and how they correspond to your research design.

- Tip - Be sure to guide your reader as much as possible. You have likely been thinking about these ideas for months or even years, but they may be entirely new to your reader. Clear signposts that signal to your reader what is coming up are very helpful.

**Method** – This section describes exactly how you conducted your research. APA style papers usually use labeled subsections to cover the following: the characteristics of your participants, your sampling procedures, your sample size and power, the measures and covariates used, the design of the study and detailed descriptions of any experimental manipulations or interventions.

- Tip - Draft the method section ASAP. It is surprising how quickly you can forget the details of the research you have conducted. It is helpful to draft this section very soon after finishing the data collection.

**Results** – This section covers your data analysis and statistics. You should assume that your reader has a professional level of knowledge concerning statistics and general data analysis, so if your techniques are common, you don't need to describe how they were done – just report the results. Consider including effect sizes and confidence intervals when possible, alongside the usual significance tests.

- Tip - If any of your analyses parallel other analyses in your paper (possibly in a different study) be sure to report the results the same way each time, including mirroring sentence structure. This makes it much easier for the reader to follow and to see which tests are equivalent in your work.

**Discussion** – In this section you should restate your findings in plain terms (without specific statistics) and explain how they relate to your original hypotheses. You should also interpret the results and discuss their implications, including both theoretical and practical consequences. You should also acknowledge any important limitations of the research. You should end with, as the APA publication manual puts it, “a reasoned and justifiable commentary on the importance of your findings.”

- Tip – Be careful not to over-claim. For instance, it is almost impossible to “prove” anything in science, so explaining that your hypothesis was supported, rather than proven true, is more correct.

**References and Footnotes** – For references see the official APA manual or helpful websites like Purdue University's Online Writing Lab (OWL). Footnotes can be used to provide additional information, particularly when you want to maintain the flow of the main text, but feel that a side point needs to be made

- Tip - Use reference management software (e.g. Mendeley) to organize your sources and create both your in-text citations and references list using a word processor plug-in tool. It will save time and develop a personal source library.

## General Tips

- **Check for author guidelines.** If you are writing for publication consider the journal to which you plan to send your manuscript. Their website will list guidelines for authors that will dictate important things like formatting and maximum word counts.
- **Be clear and concise.** As long as you get the important information across to your reader, being more clear and concise is *always* a good idea!
- **Consider using headings.** Headings are uncommon in some other forms of writing but can be helpful in providing structure to and avoiding difficult transitions in scientific writing. They can be useful in any of the major sections (the introduction, method, results and discussion). Keep in mind that the APA has guidelines for how headings and subheadings should be written. The heading guidelines are one aspect of APA style that is very likely to change from APA Publication Manual edition to edition so be sure that you are working from the most recent edition.
- **Reporting multiple studies.** It is common to include multiple research studies in a single article. Be sure to label them as Study 1 (or Experiment 1), Study 2, etc. Each study then gets its own method and results sections, and may get its own short discussion.
- **It's fine to repeat yourself a bit in different sections.** Scientific writing usually requires that you do a lot of saying what you later talk about, and also a lot of summing up what you have just said. This feels repetitive to the writer, but it is very helpful to the reader. It is especially important for readers who have started reading in the middle of the paper.
- **Use Tables and Figures.** Use tables and/or figures to convey information that is difficult to discuss in paragraph form. Be careful not to be too redundant though – generally the same information should not be included in both the text and a table.

### Further Information:

*Publication Manual of The American Psychological Association (2010)*. Washington, DC: American Psychological Association.