

Results/Findings Sections for Empirical Research Papers

an overview

If you have not already, you may wish to review the [Overview of Empirical Research Papers](#) before using this resource. An annotated Results section and other empirical research paper resources are available [here](#).

What is the purpose of the Results section in an empirical research paper?

The Results (also sometimes called Findings) section in an empirical research paper describes what the researcher(s) found when they analyzed their data. Its primary purpose is to use the data collected to answer the research question(s) posed in the introduction, even if the findings challenge the hypothesis. The Results section should also describe other pertinent discoveries, trends, or insights revealed by analysis of the raw data.

Typical structure of the Results section in an empirical research paper:

Data Analysis. In some disciplines, the Results section begins with a description of how the researchers analyzed their data; in other disciplines, however, this information appears at the end of the [Method section](#) and need not be repeated. Here, the researchers can describe how they transformed data to facilitate analysis (e.g. converting audio recordings to transcripts). They might mention what software or statistical procedures they used to analyze and interpret the data, or they might explain how they developed coding categories for a qualitative analysis. If there was missing data, they should describe how their analysis took that into account.

Findings. To paraphrase the *APA Publication Manual*, researchers should organize findings in a way that reflects the study design. For example, it makes sense to present the results of an ethnographic study as a chronological narrative. Qualitative studies that use thematic coding might break down results by theme or category, whereas quantitative studies might break up findings by research question or statistical test. In most Results sections (whether the study is quantitative, qualitative, or mixed-methods), the findings are presented in order of importance, beginning with the answer to the primary research question(s). In his [instructions](#) for writing journal articles, Daryl Bem writes, “The general rule in reporting your findings is to give the forest first and then the trees. This is true of the results section as a whole: Begin with the central findings, and then move to more peripheral ones” (p. 8).

Presentation and display of findings:

Researchers also must consider the format in which they display their results. For each finding, writers should offer a clear statement of discovery in the text (e.g., “In the short term, the intervention increased the frequency of handwashing among the study participants, especially among the older students” or “The data failed to confirm our hypothesis: it showed no direct correlation between tutors’ cortisol levels and the length of their shifts”). Each finding should then be supported with concrete evidence: descriptive or inferential statistics; narratives based on observation or field notes; photographs; excerpts from interviews, focus groups, open-ended survey responses, or texts; etc. In addition to (or instead of) describing this evidence in the text, researchers may share it in tables, figures (such as graphs or flow charts), and/or images or photographs. As the *APA Style Manual* states, “the primary purpose of any table or figure is to facilitate readers’ understanding of the work” (p. 195). Tables, for example, can help readers conceptualize numeric patterns or trends more readily than a long list of numbers in a text. Figures, too, can efficiently illustrate similarities or differences among groups. However, as the *APA Style Manual* cautions, “Readers may lose track of your message if there are large numbers of table and figures” (p. 196).

Tips and pitfalls to avoid:

- As Daryl Bem cautions in his [instructions](#) for writing journal articles, “You cannot just throw numbers at readers and expect them to retain them in memory until they reach the discussion” (p. 7). Make sure to include text in the Results section that interprets the numbers and highlights their meaning.
- That said, this section is not the place for researchers to describe why they think they got the results they did or what the broader implications of the results are (those speculations are reserved for the Discussion section).
- Make good use of paragraph breaks and/or subheadings to help readers navigate between findings.
- Make sure to review examples of Results sections from sample papers or journal articles in your discipline, as conventions for structure, content, length, and data visualization differ by discipline and among journals.