

How to Write a Scientific Abstract

Writing scientific abstracts can be challenging. However, following a few simple steps will make the process easier and increase the likelihood of acceptance. **The purpose of an abstract is to tell readers and reviewers about the significance of your work in a concise manner.** It is meant to convince them your work is valuable and will contribute to scientific knowledge in an important way. It is your job to clearly communicate this.

Although specific requirements vary, most abstracts should **target 250 to 400 words or 2,500 characters.** Abstracts should be constructed in the same manner as manuscripts in peer-reviewed journals and include five key components: title, background/purpose, methods, results, and discussion/conclusion. Often, submissions can include 1-2 supplemental figures or tables to provide additional information. All instructions will be posted on professional organization and conference websites and should be reviewed prior to drafting the abstract.

Abstract Components

- **Title.** An abstract title should be ~10-12 words and describe, as precisely as possible, what was studied and how. It should include the most relevant keywords, as some conference abstracts can be indexed and searched by title. Avoid using jargon, unfamiliar acronyms, empty words, and redundancies, such as "a study of," or "the nature of."
- **Background/Purpose.** This section should convince readers of the need for your research in 2-4 sentences (or ~20-25% of total word count). It should clearly define the problem and contain facts or statistics about its magnitude, followed by a statement about why the research was necessary (e.g., what knowledge gap it fills). Finally, **this section should conclude with a single sentence clearly stating the purpose of the research project.** Much of this information can be found in the background, purpose, and objectives/hypotheses sections of a well-constructed research protocol.
- **Methods.** This section should clearly tell readers how your research was conducted in 2-3 sentences (or ~20-25% of total word count). It should include details on the study design, time period, inclusion and exclusion criteria, and a high-level description of the type of data collected, including specific outcomes that were examined. No information about participants or results should be presented in this section. Most of this information can be found in the methods sections of a well-constructed research protocol and may need to be adjusted to reflect any modifications during the study.
- **Results.** This section should provide details about what you found in 3-4 sentences (or ~35-40% of total word count). The first sentence should state information on the participants or cases in numerical detail, including frequencies and percentages. Then, major findings from your research should be stated and supported with appropriate statistical results (e.g., P values, confidence intervals, odds ratios, relative risks) to add a measure of legitimacy.
- **Discussion/Conclusion.** This section should briefly summarize the major findings of your research and include a statement about the broader implications for patients, the profession, and/or society in 1-2 sentences (or ~10-15% of total word count). It should ultimately link back to statements made in the background/purpose section and ideally flow from purpose to conclusion. Avoid making broad statements not supported by data in your results section.