

# How to...Write an abstract

## What is an abstract?

The abstract is a brief summary of your research or overview of your paper. It must make sense as a standalone piece as many people will only read the abstract. It should describe your research accurately in a balanced and objective way. Abstracts are the basis on which your paper or poster is accepted or rejected for a conference. Potential journal reviewers base their decision to review or not on the abstract alone (publication decisions are of course based on the whole paper). The stakes are high, so it is worth practicing your skills.

Accurately summarise  
your research.

## When do you need to write an abstract?

You will need to write an abstract whenever you need to summarise your research. This could be when:

- applying for a grant to fund your project
- disseminating your findings in a journal, at a conference or to stakeholders and participants
- writing a dissertation or thesis for completion of a degree

What have you got to say?  
Who will be interested to hear it?

They will all have guidelines specific to the context and it is important to follow them carefully. Some larger conferences will not look at your abstract if it does not follow guidelines exactly.

## What makes a good abstract?

The good abstract will catch the reader's interest so that they will want to read or hear the detail. Rather than a collection of sentences about different stages of your research it will be easy to follow and understand.

What is the most interesting  
or important finding?

It should:

- be an accurate reflection of the content of the research or the paper
- contain only results that are reported in the paper
- not overstate your findings

The last couple of sentences summarise your findings and tell us why they are important.

## How to write the content.

Most journals and conferences now ask for structured abstracts: Introduction/Background, Methods, Results, Discussion/Conclusion.

Introduction, Methods,  
Results, Discussion  
(in 200 - 300 words).

For conferences, you often submit the abstract months in advance, so may not have finished your data analysis. In these circumstances be clear that analysis is not complete, include information about trends that may be emerging and provide a context for your discussion. For example *preliminary analysis indicates a modest effect of the intervention, results will be discussed in the context of the single word processing model.*

For a journal article, compose your abstract after you have written your paper.

**Introduction/Background:** setting the context; what is already known (the problem); why your study is important (aims). This is usually a short section (e.g. 15-20% of word count), aim for one or two sentence for each aspect of information.

**Aims/Research Questions:** State these clearly and include any hypothesis you have. This should be in two or three sentences.

**Methods:** study design; participants (number, short description, grouping, control etc); procedure (what you did, for how long and where); outcome measures (primary and secondary). This section should be long enough (e.g. 25% of word count) to contain enough information to convey concisely what was done, to whom and how.

**Results:** how many participants completed the study; the results of analysis the primary and secondary outcome measures in words (with p values in parentheses); numerical information about effect sizes, standard deviations etc. Report any negative findings. This section should be the longest (about 35% of word count) as it is the one that will pull in reviewers and tempt readers to read the whole paper.

**Discussion/Conclusion:** main take home message (primary outcome measure findings); further important findings; what are the implications of these findings for clinical practice, future research etc. You must be scrupulously honest and not overstate the importance of your findings (no matter how thrilling they are).

What not to include:

- Citations/reference to literature. Readers can go to your paper to read the detail.
- Minute detail about routine procedures.
- Details of the methods of data analysis such as the statistical tests used, unless this is the focus of your study.
- Results or interpretations that are not in your paper (Check. It is easy to assume because the paper will be so familiar to you).

## Style and Grammar

Scientific style is precise and objective. Ideas are expressed in a formal way. The [APA Style Guide](#) is excellent for helping you navigate the minutiae of formatting, punctuation and grammar.

When writing, keep in mind the following:

- Orderly Presentation of Ideas: use punctuation and grammar to support continuity of themes and style throughout.
- Smoothness of expression: choice of tense is important as is clarity of sentence structure
- Economy of expression: be economic with content; use short sentences; use accessible vocabulary; be concise.
- Precision and clarity: be careful with word choice (scientific not informal); avoid colloquialisms; be careful with pronoun use; avoid ambiguity, avoid undefined abbreviations or acronyms.
- Cautious: do not over state your findings, or those of other researchers.

Proof read.

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- Frontload sentences: structure sentences so that the important information is at the beginning of the sentence not the end e.g. Considering age as an important variable: *the youngest children showed the biggest effect* rather than *the biggest effect was shown by the youngest children*.
- Verbs: Active voice rather than passive. Careful choice of tense (for very clear examples of tense use see Mathews & Matthews, 2008).
  - present tense for generalisations, stable conditions and general truths or facts that are well known e.g. children with PCC below 80% **have** unintelligible speech
  - present perfect for repeated events e.g. the assessment **has been** validated on several cohorts
  - past tense for results that cannot be generalised e.g. Stringer (2005) **reported** that narrative skills **improved** after six sessions
  - past tense for reporting your research
- Noun/verb agreement: check that they do
- Pronouns: use the correct one
- Adverbs and modifiers: make sure they are appropriate and clear
- Apostrophes: check they are used only for possession (remember it's [omission] and its [possession]) e.g. The SLTs read all the other AHPs' protocols.
- Numbers from one to ten are usually written in full, numbers above 10 and decimal fractions e.g. 3.2 are usually written as numbers.

### An abstract or a lay summary?

Demonstrate your good communication skills.

A lay summary is the equivalent of an abstract but written for people who are not familiar with your field of work. Funding applications require a lay summary for the people on the awards panel who are not experts in your field (which may be the whole panel). When disseminating your findings it is good practice to include your participants and stakeholders. A good lay summary in these circumstances may also encourage others to participate in research because they can clearly see the value to themselves and others.

In a lay summary you should justify your research and clearly state the value of your findings or predicted findings. Picture who your summary is aimed at and write in a style appropriate to them. This may be service users, the general public, non-healthcare professionals, other allied health professionals, your Trust Board or researchers in fields quite removed from speech and language therapy. Use short sentences and write in plain English. Remember that some of our terminology has a different meaning outside our profession. If you need to use jargon (specialist words), explain it. The information is presented in a logical order, which supports understanding, it may not be the temporal order. As speech and language therapists we may find the lay summary easier to write than the abstract.

## Sources and resources

### Books and papers

Albarran, J. W., & Hayhow, R. (2019). Getting Published: Planning an effective writing strategy. In *Creating Practice-based Evidence: A Guide for Speech and Language Therapists* (pp. 339–364).

Andrade, C. (2011). How to write a good abstract for a scientific paper or conference presentation. *Indian Journal of Psychiatry*, 53(2), 172–175. <https://doi.org/10.4103/0019-5545.82558>

Hayhow, R., Wren, Y., & Deave, T. (2019). Sharing your findings and ensuring impact. In *Creating Practice-based Evidence: A Guide for Speech and Language Therapists* (pp. 315–337).

Hays, M., Andrews, M., Wilson, R., Callender, D., O'Malley, P. G., & Douglas, K. (2016). Reporting quality of randomised controlled trial abstracts among high-impact general medical journals: A review and analysis. *BMJ Open*, 6(7). <https://doi.org/10.1136/bmjopen-2016-011082>.

Hopewell, S., Clarke, M., Moher, D., Wager, E., Middleton, P., Altman, D. G., Schulz, K. F., Barbour, V., Berlin, J., Boutron, I., Devereaux, P. J., Dickersin, K., Elbourne, D., Ellenberg, S., Gebski, V., Goodman, S., Gøtzsche, P. C., Groves, T., Grunberg, S., ... Simera, I. (2008). CONSORT for reporting randomized controlled trials in journal and conference abstracts: Explanation and elaboration. *PLoS Medicine*, 5(1), 0048–0056. <https://doi.org/10.1371/journal.pmed.0050020>

Matthews, J. R., & Matthews, R. W. (2008). *Successful scientific writing: A step by step guide for the biological and medical sciences* (3<sup>rd</sup> ed.). Cambridge: Cambridge University Press.

### Web resources

Conte, S. Make a Great First Impression: 6 Tips for Writing a Strong Abstract  
<https://www.aje.com/en/arc/make-great-first-impression-6-tips-writing-strong-abstract/>

George Mason University, USA Writing Centre <https://writingcenter.gmu.edu/guides/writing-an-abstract>

Tancock, C., (2018) How to write a lay summary. <https://www.elsevier.com/connect/authors-update/in-a-nutshell-how-to-write-a-lay-summary>