Poster Presentations: Tips for Sharing Your Research and Connecting with Fellow Researchers

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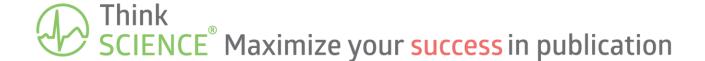
For researchers, bringing attention to your work, sharing and discussing your results with others, and keeping up to date with the latest developments in your field are ever-important challenges. Nowadays, many researchers share their work via social media using infographics, videos, and other forms of enhanced publications,

but the benefits of more traditional methods of discussing your work in-person, such as at conferences, should not be underestimated.

In particular, **conference poster presentations** are a great opportunity to make your studies known and to engage with your fellow researchers in real time. Also, the development of <u>virtual</u> (<u>online</u>) and <u>hybrid conference formats</u> and the return of in-person conferences now mean that there are more ways than ever to give poster presentations.

While readers in our specialist field can benefit from reading our research papers, a broader audience may also benefit from learning about our work. Interdisciplinary and cross-disciplinary research is growing, and the general public can more readily access scientific works. Nowadays, we have the chance to reach more people who could be interested in and could benefit from knowing about our work, **but we have to compete hard to get their attention**.

In this featured article, we'll take a look at what poster presentations are, how they benefit authors, and when best to make use of them. We'll also offer comprehensive tips and important considerations for creating effective posters and presenting them with authority.



What are poster presentations?

Poster presentations have some similarities with traditional oral presentations, but also differ in some key ways. The more obvious is the use of a poster (rather than slides), which is a large visual representation of your study using text, charts, graphs, and other visual aids to summarize your findings. The poster should quickly communicate what your research is about at a glance, while also being thorough and clear enough for others to understand how you obtained your findings and the contribution to your field.

The poster may be an actual physical poster that you will display in the poster hall at the conference or it may be a virtual (digital) poster posted on the conference website. You will refer to the contents of the poster during your poster presentation, and your poster will also be made available before or after your presentation for other researchers to read at their leisure.

A crucial difference between oral presentations and poster presentations is in how you actually present your study and poster. On the spectrum of speaker—audience engagement, think of a poster presentation as being more on the side of a discussion compared with a "pure" oral presentation where questions are usually reserved for a dedicated Q&A session at the end. In poster presentations, you should be prepared for attendees to ask questions or make comments about your work as you talk through the poster contents—and you can even encourage their questions and comments when talking together in the poster hall.

What happens at poster presentations?

There are several different formats of poster presentation, but typically presenters are given a dedicated time slot in the conference program to stand by their poster (or attend an online session) and talk about their research. This poster session (or virtual poster session) gives the presenters opportunities to engage with visitors during and after the presentation. You should be prepared to give a short presentation that can be repeated multiple times as different people visit your poster during the allotted time.

When you're not at your poster, you're free to roam around and look at other posters, attend other poster presentations, and network with the other attendees—so have your business cards ready! This is also a good opportunity for you to distribute smaller printouts of your poster (or its key elements) in case you come across someone who has a related study or shows interest in your research.

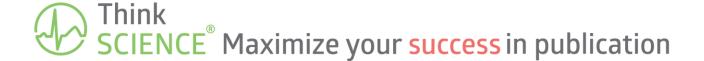


For very large conferences, especially international ones, be aware that you probably have to compete for attention. There will likely be many other posters on display, and other poster presenters may be popular due to their expertise in the field. Also, you and other attendees might be tired or jetlagged, the lighting might be poor, the poster hall might be noisy, and there could be other distractions that reduce attention. Therefore, it's important to ensure that your poster stands out from the crowd.

Why should you consider giving a poster presentation?

- To start, poster presentations are an excellent way to share your latest results quickly.
 This is especially important when your findings are high impact, and poster
 presentations are a great alternative to other <u>fast-track publications</u>. There are many
 opportunities for poster presentations as most conferences include them in their
 program.
- Poster presentations are also an excellent chance to **develop a network of fellow researchers**, which may be especially beneficial for younger researchers. Establishing your network can open up possible avenues of future research collaboration.
- More immediately, you can look at a poster presentation as a sort of informal, mini
 peer review: feedback and questions from attendees may bring to light new research
 directions or some blind spots you may have missed in your study. While visitors to a
 poster presentation may sometimes be more junior, senior researchers will often attend
 them to offer advice.
- Because of their less formal structure (compared with traditional oral presentations or lectures), poster presentations are useful for developing your general presentation skills and for managing questions and discussing your work in real time. You can even look at this as practice for talking authoritatively about your research.
- Sometimes there are even **some journal-specific benefits**. For example, winners of the Best Poster Award at the <u>International Conference on Oncology and Cancer Research</u> in October 2023 had the opportunity to publish their studies in a number of supporting international journals at a reduced article processing charge.





When should you give a poster presentation?

As to whether you should present your findings before, during, or after publication of the full research paper in a journal, that largely depends on your goals for giving the presentation and consideration of publication ethics.

Before publication: If it's more important to disseminate your research as quickly as possible (e.g., to establish priority in some technological fields or when your findings are of immediate benefit), you may consider presenting before submitting your research paper to a journal. This would also be useful for fine-tuning your study or full research paper based on feedback from attendees. Usually journals do not consider poster presentations as prior publications, but check what constitutes prior publication in the guidelines of any journals that you may want to submit your full paper to. In any case, it is good publication practice to inform the journal editor of any previous presentation, in whole or in part, of the paper's contents when you are submitting your paper.

During or after publication: Presenting a poster about your published paper can be a great way to get ideas about future directions of research. It can also be instrumental in expanding your study's reach so that others become aware of your research. This is helpful not only because people may change their thinking/actions based on your work, but also because it may increase the chances of others citing your work and thus increase its impact, which is important for career development. However, note that you need to consider publication ethics, and specifically copyright rules, carefully in this case. As explained in detailed advice from the Committee on Publication Ethics (COPE), check the journal's guidelines and your publishing agreement about whether this is allowed and in which form. Moreover, check the conference guidelines as to whether the conference allows already published work (or forthcoming articles accepted for) to be presented, because some conferences do not.

Designing and creating your poster

Before you begin to create your poster, be sure to read and follow the conference guidelines about dimensions, delivery method, presentation time, and copyright. There may also be rules about whether you can give the same presentation again (an "encore" presentation) at another event. For example, an encore presentation might be permissible if you want to present a poster in Japanese that was originally presented in English at a different event.



Similarly, as mentioned above, double-check with your target journal (if you have not yet published) or publishing journal (if you have) as to whether you may present the same findings as in the poster presentation, and the rules for doing so.

Consider the following points to help make an attractive and authoritative poster that effectively advertises and explains your research.

Begin by choosing the most important or interesting finding from your study, and keep this finding in mind as you continue to add content to your poster. You will want to highlight this key finding.

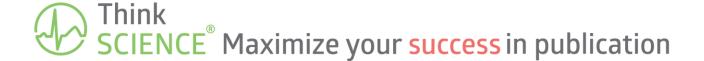
Printing your poster: Paper or cloth (fabric, canvas)?

Printers will have a number of options for printing your poster in the appropriate size. A high-quality paper is a more affordable option and provides excellent sharpness of text and images, but it will need to be transported in a tube for protection against creases and tears.

A cloth poster can be safely folded or rolled into a poster tube. The material is more expensive to print, and text and images are a little less sharp on cloth than on paper. However, cloth posters are more durable and they may be a good option if you want to store or reuse the poster in your department or company.

- Many authors start designing their poster using figures and tables, just like they might when first starting to write a manuscript. Use these clear visual representations and build a narrative around them. Be careful though: Some people base their poster on their finished or drafted manuscript, which is fine if they avoid copy/pasting text, because manuscript writing is often not as concise as what's needed for a poster.
- If you're struggling with settling on an overall design, don't worry. Many examples of posters are available on the internet. Some conferences will publish posters from a previous year so you can use them for guidance. But beware, bad posters are still published, so you will need to judge for yourself what is a good poster.
- Templates are also widely available online. In fact, many academic societies provide templates for their own conferences, making it easier for authors to meet specific requirements.
- Remember that your poster is a great opportunity to direct people to your full study. QR codes are especially useful here, as attendees often carry smartphones. There are a number of free QR code generators available online.





Layout and format considerations

As a first step, always check the guidelines of your desired conference and follow any specific instructions or poster templates provided. When unsure, however, keep in mind the following points.

- The title should be in a large font so that it can be viewed from a distance of around 1.5 m. From there, size elements according to their importance: the author byline may be slightly larger than the rest of the text, for example.
- Use a sans serif typeface (Arial, Helvetica, etc.) and not a serif typeface (Times, Courier, etc.) for improved readability. You should also avoid any non-English typefaces like MS Gothic or Yu Mincho.
- Posters are usually arranged in landscape orientation, with sections divided into columns from left to right, from top to bottom in each column.
- Aim for a text-to-visuals ratio of about 50:50. Your graphics should do a lot of the heavy lifting here: as they say, "a picture paints a thousand words."
- Don't be afraid to make use of color, but avoid light text on dark background because for printed posters this is a waste of ink and you might receive a large printing bill!
- Similarly, avoid complementary colors for the text and background. These colors can cause text to "move" and become difficult to read, with cool colors moving to the background and warm colors moving to the foreground.

What to include in your poster

Often, posters follow the standard **IMRAD** (Introduction, Methods, Results, and Discussion) structure for scientific manuscripts. In recent years, the **#betterposter movement** has advocated for posters that prominently show the key message (to attract attention) with some smaller surrounding details and a large QR code to direct visitors to read details elsewhere. Learn more about the **#betterposter movement in this video**.

Regardless of how you will design your poster, you need to show your critical thinking and scientific reasoning: give the title followed by author information, an overview of the background, a brief explanation of what you did, the key finding(s), and a conclusion that highlights the implications of your work. You may need to add some ethics statements or



acknowledgements depending on the type of study and field you work in. The poster usually finishes with a concise list of the most important references, and you may give your contact details (usually email is fine, but again a QR code can be useful here).

You don't need to add an abstract to the poster itself because you will typically be asked in the conference guidelines to submit an abstract separately from your poster. This abstract is then printed in a conference booklet, and it is usually because of this abstract that others will decide to attend your poster presentation.

• Introduction

Poster content: Keep this short. Not only is poster space limited, but usually other researchers will already have knowledge about your field, so you don't need to add that much detail. Also remember that if you'll be standing next to your poster, visitors can always ask to know more. As a rule of thumb, 1-2 paragraphs should be adequate. Provide just enough background so that people understand the context of your work, the research problem or question that you're addressing, and your aim or hypothesis.

When presenting: Ask the visitor what they know about your research topic so that you know whether to give more background information verbally or whether you can let the poster speak for itself.

Methods

Poster content: Focus on what's novel or critical to your study. For well-known methods or previously published techniques, just add a reference.

Use images (figures, tables, photos, schema, flow charts, etc.) if it helps convey the methods with less text to read.

When presenting: If you're giving a presentation before publishing your findings, you might ask the audience for their opinion on the study design.

Results

Poster content: Focus on the most important findings of your study here.

Present data as tables or figures with short captions that highlight the main finding.

When using text, limit this to one paragraph where possible—about 3 sentences should be enough.

When presenting: Ask visitors if they would like further details. Be sure to have back-up data on hand in case anyone shows particular interest.



Discussion

Poster content: Just like in a standard manuscript, interpret the results in this section: discuss relationships within your own findings, and discuss your own findings with what's already known in the literature.

Bullet points are effective for presenting your key take-away points.

When presenting: Ask the audience what their thoughts are, or whether they have any other ideas about future directions.

Conclusion

Poster content: Include limited amounts of text or maybe a few bullet points summarizing your study with its implication(s).

A diagram illustrating your conclusions can also be effective here.

When presenting: Finish up by inviting the visitor to ask questions: for example, "So, that was our main finding/recommendation. Do you have any questions or feedback about our work."

Presenting your poster

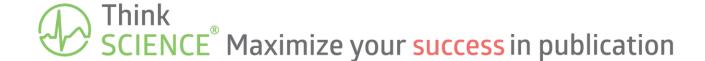
While it's important to remember that there are some crucial differences between poster presentations and oral presentations, many considerations are the same (in fact, we've already discussed some tips for giving oral presentations in previous articles (here, and here, and here) and for handling difficult Q&A moments.

Let's take a look at some tips that are especially important for poster presentations.

- Try to grab your audience's attention as quickly as possible, within the first 30 s, because you need to persuade them to stay and listen to you (and also to block out other distractions mentioned earlier).
- Don't just read the title in your opener, but briefly summarize your study's aims and implications. For example, the following would work as a good opener for this study:

"Hello, and thank you for coming to see my poster. My name is XXX YYY and our team determined whether nutritional counseling in elite athletes increases lean body mass and strength, and what this means for designing optimal nutritional strategies."





- Smile and be positive and enthusiastic. Your positive energy will rub off on the audience.
- Speak confidently and with authority. Remember, it's your research!
- Have good posture and make use of open gestures and body language to engage the audience. For example, stand alongside your poster or at a 45-degree angle to your poster so that you are facing your listeners but can easily turn to and point to your poster as you speak.
- Posters will likely be viewed by a diverse audience, including not just researchers, but also students and various non-research professionals, so be ready to explain your work at different levels.
- Finally, remember that this is a discussion, so be prepared for and encourage interjections and questions from visitors to your poster. Think about what questions people may ask you. Prepare and practice giving concise answers and questions asking the visitors what they think.

Summary

Like oral presentations, poster presentations are an effective tool for raising awareness of your research and making your findings more quickly and widely available. Unique to poster presentations, however, is their potential for open discussion and feedback in real time. While having to create a poster as well as prepare to present it can be daunting, there are many benefits to giving poster presentations and we hope our tips are helpful.

Of course, whether you need help following any guidelines or requirements of your conference, creating attractive graphics for your poster, summarizing your research, or even preparing your poster presentation, our team of translators, editors, and writers at ThinkSCIENCE are just an email or phone call away and welcome the chance to support you in presenting your research. If you are planning to give your first poster presentation or an important one and you would like some personal help, we also provide private coaching sessions so that you can present with confidence.

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