

chapter 03:

Scientific Presentation Guide

Delivering impactful research defenses and academic talks



Four skills, one convincing defense



Storyline

Build a focused argument, not a chronological diary.



Visual design

Slides are for viewing, not reading.



Delivery

Finish early and speak without hesitation.



Q&A

Be honest and keep backup slides ready.

Avoid the data dump: tell one story



The data dump

- Every piece of data collected is shown
- A chronological diary of the project
- The audience loses focus



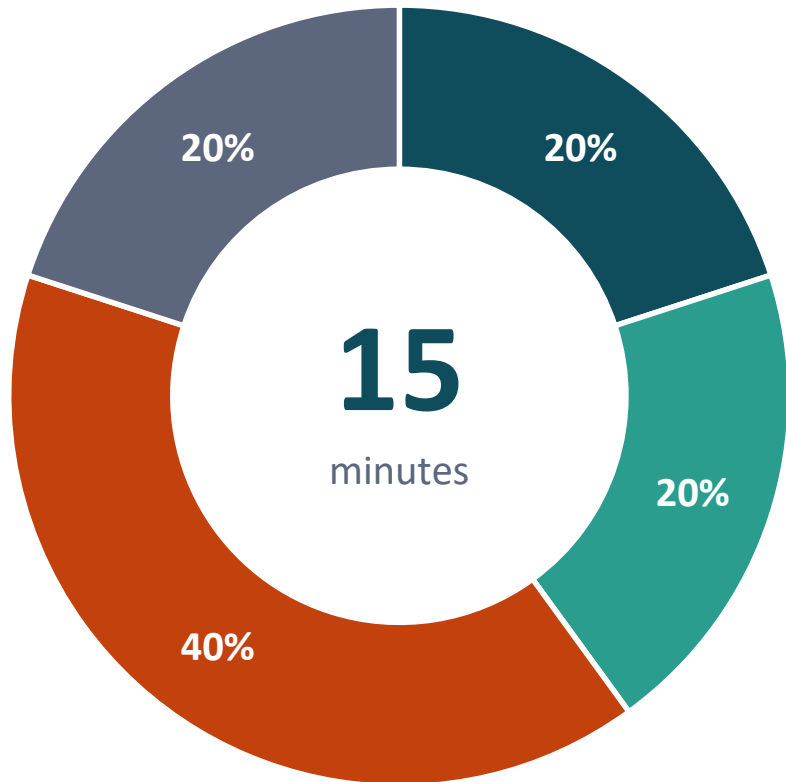
The focused argument

- One clear research question
- Only the data that supports it
- The audience follows each step

THE RULE OF ONE

Every slide and every piece of data must directly serve the core research question.

The 15-minute blueprint



Context & Hypothesis ~3 min

Define the specific gap in the literature and your core question.

Methodology ~3 min

Stay conceptual: visual diagrams instead of block-text protocols.

Key Results & Discussion ~6 min

Show only the data that supports your conclusions. Highlight trends.

Conclusion ~3 min

Summarize the main contribution and state future outlooks.

The Anti-Text Rule

36–40 pt

minimum for slide titles

24 pt

minimum for body text



Do not use

Full sentences and paragraph blocks. Slides are for the audience to view, not read.



Use

Short keywords or high-quality schematics. If it is illegible from the back of the hall, it does not belong.

Make every figure speak for itself



No blurry screenshots

Or unedited spreadsheet exports. Re-draw every figure cleanly.



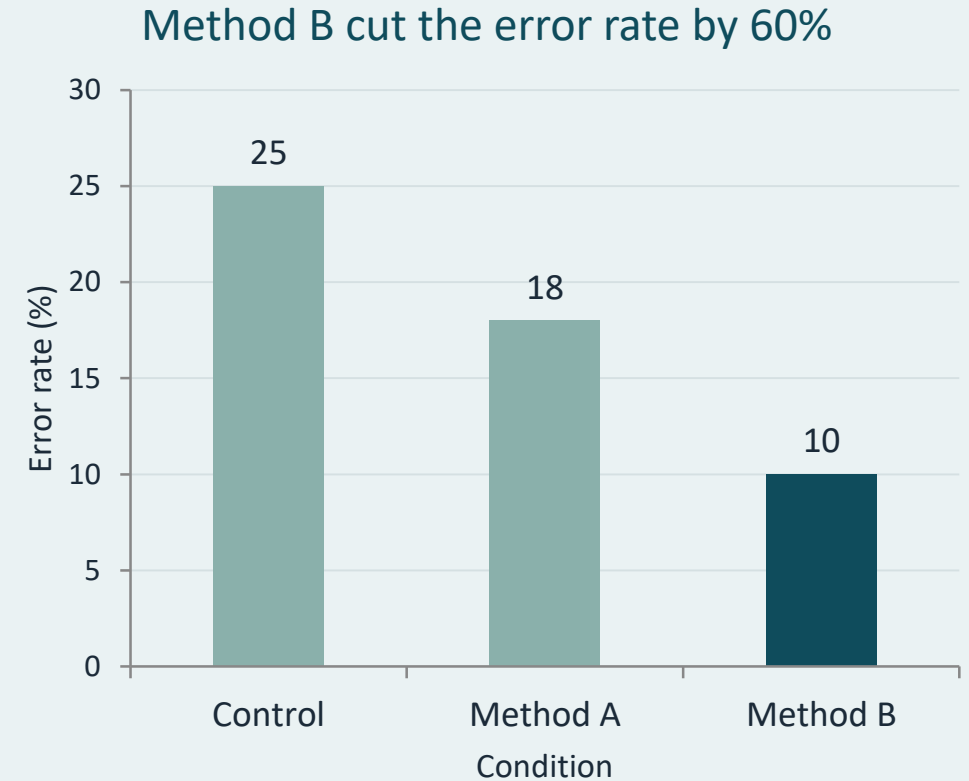
Label every axis

Name the variable and the unit so nobody has to guess.



Headline the takeaway

Give each figure a descriptive title that states the message.



Illustrative example: labeled axes + a headline takeaway

Own the stage



Ruthless time management

1–2 min

early: practice until you finish ahead of time, to absorb technical delays and nerves.

Body language



No reliance on sheet notes

Know your research well enough to speak it, not read it.



Face the committee

Don't stare at the laptop or turn your back to read the projector.

Mastering the Q&A session

WHEN YOU DON'T HAVE THE DATA, SAY

“That is an excellent point. We did not isolate that specific variable, but it would be a critical next step to explore because...”



Never make up an answer

It is an automatic fail.

1 Acknowledge the point



2 Name what you did not isolate



3 Propose the next step

Your secret weapon: backup slides



5–10

hidden slides placed after the conclusion



Deep-dive protocols

The detailed methods you kept out of the main talk.



Raw data sets

The data behind each summary figure.



Error margins

The uncertainty behind your key results.

Pull them up instantly when the jury asks a technical question.

Take-home checklist



One research question; every slide serves it



Keywords, not sentences: 24 pt body, 36–40 pt titles



Labeled axes and a headline takeaway on every figure



Rehearse to finish 1–2 minutes early



Admit gaps honestly and propose the next step



Prepare 5–10 backup slides for the jury