

The background features a light gray geometric pattern of overlapping triangles. In the center, two dark gray silhouettes of human heads in profile face each other. Between them are two overlapping speech bubbles, one slightly above and to the left of the other, both filled with a muted green color.

# Effective scientific writing

PSYC 11: Laboratory in Psychological Science

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# Pieces of a paper

## Standard paper sections

- **Title:** one-line take-home message that attracts interest
- **Abstract:** 250--500 word summary (question, approach, findings)
- **Introduction:** your question, why it matters, what is already known
- **Methods:** what you did (participants, experiment, analyses)
- **Results:** what you found (figures + stats that tell a story)
- **Discussion:** what it means, broader context, future directions

# The common thread

## Every section tells the same story

- Every section reminds the reader of the **question**, the **approach**, and the **key findings**
- Different sections emphasize different aspects
- A reader should be able to get the gist from **any single section**

# What makes writing effective?

## Qualities of good scientific writing

- **Easy to read:** clear sentences, logical flow
- **Empathetic:** written for the reader, not the author
- **Concise:** say what you need to say and then stop
- **Trustworthy:** claims are supported by evidence
- **Interesting:** the reader wants to keep going

# How much should you write?

## Less is more

- Never write to "fill space"
- Include something if (and only if) it is:
  - Directly relevant to your core message
  - Necessary for someone to reproduce or understand what you did
  - Adding a specific tangible element to your story
- When in doubt, cut it

# Discussion: read this paragraph

Activity (10 minutes)

*"In this study, we were basically interested in looking at whether or not there might be some kind of relationship between the amount of sleep that college students get and their ability to remember things that they learned in class. We think this is important because sleep is something that affects a lot of people and memory is also very important for students."*

- What is **wrong** with this paragraph?
- How would you **rewrite** it to be clearer and more concise?
- Discuss with a partner, then we will share revisions as a class

# Principles for revision

## Editing checklist

- **Cut filler words:** "basically," "some kind of," "whether or not"
- **Be specific:** replace vague claims with concrete ones
- **Use active voice:** "we examined" not "it was examined by us"
- **One idea per sentence:** if a sentence does two things, split it
- **Read it aloud:** if you stumble, your reader will too

# Empathy as a writing strategy

## Write for your reader

- Put yourself in the **reader's** position
- What would **you** want to read about?
- What would you find interesting, convincing, worth your time?
- The best scientific writing feels like a **conversation** with a knowledgeable friend

# Your paper: getting started

## Next steps

- Start with an **outline** -- map your story before writing sentences
- Write the **Methods** section first (you already know what you did)
- Then **Results**, then **Introduction**, then **Discussion**
- The **Abstract** comes last
- Bring a draft to your TA for feedback early and often