Organization of a Science Paper

- Introduction
- Method
- Results
- Discussion
Parts of an APA Report

• Title Page*
  – page header, running head, title/author/affiliation*, author note
  – Abstract*
• Introduction*
  – statement of problem, literature review, hypotheses
• Method*
  – participants/subjects, materials/apparatus, procedure
• Results
  – statistics, tables, figures
• Discussion
  – summarize results, interpret, alternative explanations, relate to literature, what next, conclusions
• References*
• End materials
  – appendices, footnotes, tables, figures and figure captions

* include in your paper!!
Guidelines

• Make an outline first (paragraph by paragraph)
  – Each paragraph should have one theme (title sentence and summary sentence)

• ABSTRACT
  – Don’t put statistics in the abstract
  – DON’T include specific procedures, only GENERAL procedures
  – MOST IMPORTANT is to explain the results
    • What do they tell us?
    • Why are the results interesting?

• INTRO
  – Start with a broad picture and why this topic is of interest
    • everyday example?
  – Don’t just list a series of findings in the introduction
    • construct a logical flow that leads to the hypothesis
    • only include details if needed for this experiment
    • almost always use the past tense (just a few exceptions)
      – describing the current hypothesis
      – describing implications of the results
Method

• Include enough detail so that other researchers can replicate without having to contact you

• Participants
  – how many
  – demographics
  – motivation to participate

• Materials
  – creation/selection of stimuli (words)
  – software and hardware used to administer the experiment (power point, paper, etc.)

• Procedure
  – experimental design
  – controls and counterbalancing
  – instructions
  – data collection
PowerPoint Presentations

• Similar sequence as in APA report
• Don’t use too much text (text serves as a reminder)
• Use pictures and figures as much as you can
• Plan on 4 minutes plus 1.5 minutes for questions
• Suggested slides (5-6 slides in total)
  – title
  – everyday example
  – background literature review ending in hypothesis
  – overview of experimental sequence of events
  – method specifics (e.g., 2 X 3 design, materials, # of subjects, etc.)
  – summary of experimental predictions based on hypothesis with ***hypothetical data graph***
APA Style

- Write so that someone can replicate
- Writing style
  - clarity and simplicity
  - use words < 10, and numbers 10+ (some exceptions)
  - active tense (not passive)
  - significant (statistics) / important (meaningful)
  - since(time) / because (causation)
  - that (no comma) / which (after comma)
  - affect (most likely for verb) / effect (most likely for noun)
  - participants/subjects
  - plurality issues
    - data were
    - analyses, criteria, hypotheses, phenomena, stimuli
  - gender neutral language
  - owing to (because of) / due to (caused by)
- Format
  - double spaced, 1” margins, 12-pt Times Roman
When and how to cite

• Don’t overuse quotes
• Cite appropriate references whenever
  – you state some finding, even if it's very well known and common knowledge
    • e.g., without rehearsal, short-term memory lasts less than 30 seconds (Peterson & Peterson, 1959)
  – whenever you describe a theory that is not your own
  – whenever you describe an experimental paradigm/method
  – for stimulus norms or prior use of stimuli
• Cite your *actual* source: don’t assume that what you read in a review/textbook is correct!!
• There are many forms of plagiarism
  – don’t paraphrase
  – don’t use the same logical flow and paragraph structures
  – don’t self-plagiarize
In Text Citations

- Use “and” in text.
  - Yes: Smith and Edgar (1987) …
  - No: Smith & Edgar (1987)
- Use “&” in parentheses.
  - Yes: (Smith & Ho, 1986)
  - No: (Smith and Ho, 1986)
- Repeated citations
  - For three or more authors, use et al. after first use
  - For articles with six or more authors, always use et al.
  - Only include the date the first time within a paragraph
  - No need to constantly state the names if only discussing one article in the paragraph (i.e., They found that….; They developed the theory of….)
References

• Journal articles

• Books

• Book Chapter