

Lab Report(s) Rubric

All components will be graded by *quality* and not simply by their presence in the document.

GENERAL FORMAT

- 5-8 double-spaced pages (not including Cover Page, References, or Figures/Captions)
- Page format
 - ◆ APA style cover page with appropriate title and format
 - ◆ Please print double-sided and save trees!
 - 1 inch margins on right, left, top, and bottom Times New Roman, Arial, or Calibri
 - Size 12 font
 - Page numbers in header or footer Basic spelling and grammar
- Scientific style of writing

All of the CAPS UNDERLINED HEADINGS as well as the *italicized subheadings* (in Materials and Methods) are recommended to be used in the document, as is typical of an empirical paper.

1. INTRODUCTION = 25 points (1-2 page) Big picture question

- What is the issue and why is it important/relevant?
- Road map for proceeding through background information.
- Background evidence that this effect occurs (and why)
- Evidence in the form of data and not conclusions made by other authors
Bad: ~~Smith et al. (2010) concluded that caffeine affected memory.~~
- Better: Participants that consumed 3 cups of coffee/day recalled more words from a list than participants that did not consume any coffee (Smith et al., 2010).
- Integrated conceptually and flows well.
- Tip: organize by topic/issue and not necessarily by author.
Logic is clearly explicated for the reader.
- Transition into Methods
- Write in *past* tense.
- Specific experimental question
- How are you going to accomplish your specific experimental question?
State hypothesis.

2. MATERIALS AND METHODS = 15 points (1 page)

- *Participants*
- What is the sampling technique employed?
- Total number of participants (including number of males and females) Age range for both males/females; provide mean and standard deviation.
- *Materials/Apparatus/Equipment*
- What did you use to run the experiment?
- Describe the materials used (i.e. questionnaire, etc) and cite as needed.
- *Procedure*
- How did you run the experiment?
- Explain your assignment/counterbalancing.
- Can the reader replicate your experiment based solely on your description?
- *Data Analysis*
- What is your design?
- What is your independent variable(s)? What are the levels? How is it manipulated? What is your dependent variable(s)? How is it measured?

- Basically, how are you operationalizing your conceptual construct(s)?

3. RESULTS = 30 points (1-2 pages)

■ GRAPHICAL ILLUSTRATIONS

- Format

Figures and tables come at the very end of the manuscript.
Refer to the figures and tables in the writing portion (Results).

- Content

Use the appropriate and relevant figure(s) for the data: tables, bar graphs, scatterplots, etc
Include error bars if appropriate.

- Captions

Include table/figure captions (plus what the error bars refer to, if relevant).

■ Descriptive statistics

- Must be referenced appropriately either in a table, figure, or written portion. Provide at least one measure each of both central tendency and variability.
- If mean is not the most appropriate measure, provide a different measure as well as your justification for using that measure.
- Based on the descriptive statistics, what is your initial impression of the data (i.e. shape of distributions, anticipated results).
- Report inferential results and correct statistics in APA style.
- What statistical procedure did you use to analyze the data?
- Discuss main effects, interactions, and post-hoc comparisons (as appropriate/relevant). Indicate effect size and describe what it means.
- State your conclusion, based on the aforementioned statistics.

4. DISCUSSION (2 pages) (25 points)

Note: This section includes two portions:

“Conclusions” (10 points) and “Evaluation” (10 points).

You should consider *integrating* the content together (thus, do *not* have separate Conclusions and Evaluations sections). However, for the sake of clarity, we have indicated the components separately on this rubric.

a. Conclusions (~1 page)

- State your specific experimental question and what you did about it.

Example: “In the current experiment, we investigated whether or not _____ (the IV) had an effect on _____ (the DV) by manipulating _____ and measuring participants’ _____.” Re-state hypothesis—did you find support for or against it?

- Integrate your result(s) with background literature.

Tip: reference whether or not this fills in what was missing in the literature.

- What are the implications from your experiment?
- Zoom back out to big picture question
- What is the issue and why is it important/relevant?

b. Evaluation (~1 page)

- Discuss limitations and problems with your experiment.
- Was your experiment/design reliable and valid?
- Reference the three major types of reliability if applicable (i.e. test/retest, interrater, internal).
- Reference the four major types of validity (i.e. statistical, construct, internal, and external).
- What did you do in order to try and improve the reliability/validity? What could you have done better?
- Propose one experiment as Future Directions.
- It should accomplish *one* of the following options:
 - #1: How would you design a follow-up experiment to fix the limitations that you had?
 - #2: How would you extend your results into another, separate experiment?

For Option #1: Provide sufficient details as to how and why this would help. Do not simply say “Change convenience sampling to random sampling” or “sample more participants or “run participants from a different university.”

Helpful Hints:

As mentioned, your Discussion should contain the above information. However, we strongly recommend that you *integrate* the components together.

Consider your Discussion as a reverse QALMRI. Your Introduction began with big picture information and focused on a specific experimental question. You now have the results to your specific experiment; you want to summarize those results and zoom back out to the big picture issue. You should end your Discussion with implications for this big picture issue.

5. REFERENCES/CITATIONS

All assigned empirical articles

Must also cite them in the written document

Within-document citations must be APA format and used appropriately.

APA format (hint: no “doi” links)

Total Score: _____/100