**Lab Reports**

You will complete **four** partial lab reports for the studies we conduct in labs. The focus of each lab report will be the **methods** and statistical **results** sections, written and formatted in **APA style**, as they would appear in a formal lab report or psychology journal article. Each report will also have an introduction and discussion section, but these will be written in bulleted or abbreviated form (in full sentences, but not in depth).

General Instructions for writing these partial lab reports are provided below.

**It is important that you read this handout thoroughly before you begin your assignment, and you complete the checklist at the end to make sure you have provided all of the information required!**

**The introduction section,** which has no heading, states the problem or question being asked by the reported research, and the importance of the question. The bulk of this section is background literature on the topic that provides a theoretical or empirical basis of your research project. You will learn more about how to write a thorough introduction when you move on to *Research Methods II: Application and Integration*, and so it is **not** the main focus of these assignments. Thus, for the partial lab reports in this class, you will simply provide the following information in bulleted sentences:

* Provide a general overview of the topic under study (1-2 sentences). Cite the source article (if provided)
* State your research question and hypotheses/predictions and justify them (1-2 sentences per hypothesis)

**Method**

[This section describes how the problem was answered, that is, how the hypothesis was tested, in enough detail for a reader to repeat (replicate) the study by reading this section. The methods section is usually divided into three subsections:]

**Participants**

[Describes the important characteristics of the participants in the study, including how many there were (*n*: the sample size), their gender distribution (report this in percentages unless your sample size is small, “64% female”), their races/ethnicities (in percentages), where you recruited them (e.g., from students in the Research Methods 1 courses, and any of their friends and family who also completed the task) and why they participated (for credit, for money, as part of a classroom activity, etc). This should be written in FULL SENTENCES.

**Procedure**

[The procedure is where you describe WHAT PEOPLE **DID** IN THE STUDY (past tense). Although you can paraphrase some parts of the lab report description, there are some parts that should be specific to what **YOU** did. For example: “The participant(s) in the experimental group were exposed to one drink per hour and their cognitive abilities were assessed at each hour interval. The participant(s) in the control group were of equal baseline cognitive ability, were not exposed to alcohol, and were tested on their cognitive ability each hour.” You need to provide enough information about the steps you took to test your participants so that someone who is interested in replicating your study can do so just by following your procedure.]

[Describes any apparatus or questionnaires used. For example, if you used surveys in your study, you would describe what types of surveys: were they paper and pencil surveys? Internet surveys? Did you use a video camera to record your participants? You must state so, including the make and model of the camera used. Did you use a particular computer program? Did you use a published measure like the Beck Depression Inventory? If so, you must provide the citation for it and include this citation in your references section (which comes at the end). It is a good idea to include example items from each measure as part of your description. You must also provide information about how each measure is scored, what the scores mean (are higher scores better than lower scores? is there a cut off score?), and the (approximate) time it took to administer each measure.

In essence, you must provide enough information so anyone who wants to can replicate your study without contacting you for information.]

**Results**

[The results section is for reporting the **descriptive** and **inferential statistics** of the report. You should not go into a detailed explanation of what you think the numbers or statistics mean (that comes during the discussion), though providing a brief interpretation of each statistical test you run is usually a good idea (for example, describing a positive correlation by explaining that participants who scored higher on one measure also scored higher on another). You can refer to tables or graphs if that helps to convey the results better than sentences.

The results section should begin with an overview of your data, including how your measures were scored, any data management steps you had to take before your general analyses, and any issues you had with the data (e.g., removing outliers or errors). This is also where you might provide statistics on the reliability of your measures and explain whether you averaged or summed certain items together to create an overall index or composite measure.

Next, you should report the results of each of your hypothesis tests, starting with the main one (if more than one hypothesis was proposed). ]

**Discussion**

[Similar to the introduction section, you will report your interpretations *in plain English* of each of your results reported above. Typically, the discussion starts with a brief recap of the initial motivation for the study and a quick recap of the methods (for example: “*In this study we investigated the role of stimulus type and task instructions on memory performance. We hypothesized that*…” There should NOT be any statistical notation in this section.

* *For example, if you reported a t-test above, your interpretation might sound like:* Holiday type did not influence participants’ feelings for Hallmark commercials. Both groups had similar levels of happiness after watching the video.
* Do this for each of your statistical tests
* Your last sentence should be a statement about your hypotheses. Did the result support your hypothesis or not? Why do you think this is the case? (Remember, we can only *find evidence to support* a hypothesis; we can **never** prove a hypothesis!) ]

**References**

[If you cited articles in your report, you need to include the APA formatted references here. ]

**General Guidelines and a Checklist**

**All document layouts must adhere to APA Style guidelines:**

* + Typed, in Times New Roman 12pt font
  + Double spaced
  + 1” margins on all sides
  + 1st paragraph indent 0.5”
  + Left justified text
  + One space after a period. Like that. Not like this!

**Write thoughtfully!**

* + **Tenses:** You need to choose a tense in which to write your paper and then be consistent. By the time you are writing up a study, you have already performed the research. Thus, it makes the most sense to use past tense throughout the paper. Similarly, if you are summarizing papers written about studies that have already been completed, it makes sense to use the past tense. Never use the future tense. It doesn’t make sense to talk about how “the experimenter will test the child” etc. if you’ve already performed the research. So, pick a tense, and be consistent.
  + **Grammar/Spelling:** Use complete and grammatically correct sentences, and make sure you have spell-checked your entire document for errors before submitting it to your instructor.
  + **Language:** DO NOT use colloquialisms (informal speech). You are writing for a professional audience, and you should write your paper as such.

**General Checklist**

☐ Did I review and follow the template and general instructions for lab reports?

☐ Am I using Times or Times New Roman 12-point font and double spacing throughout?

☐ Am I following APA formatting guidelines throughout?

☐ Is my writing clear, concise, and grammatically correct throughout?

**Introduction**

☐ Do I have a brief set of clear and concise introductory bullet points?

☐ Did I explain what the current study is about (e.g., for lab report 1, investigating the effects of large versus small anchors on estimations)

☐ Did I specify my hypotheses in a clear and concise way (e.g., for lab report 1, that larger anchors will lead to relatively larger estimations compared to smaller anchors).

**Methods**

☐ Is my description of participants clear and informative, including gender breakdown (relative frequency), age (*M* and *SD*), and ethnicity (relative frequency) information?

☐ Are my materials accurately described in terms of exactly what surveys were used? Did I double check by looking at the survey Word doc on Brightspace?

☐ Do all relevant questionnaires provide citation info (if created by another), # of questions, description of rating scale, including anchors, explanation of how it is scored, and 1-2 example questions?

☐ Does the manipulation (if there was one) clearly describe the experience of the various conditions and how they differed? Is a descriptive label provided for the conditions that can be used throughout the paper?

☐ Is my procedure accurate, detailed, but concise? Note this section can be combined with materials

☐ Did I remember to include the fact that we collected certain demographic information?

**Results**

☐ Did I specify which statistical tests I used and what data went into the tests?

☐ If necessary, did I report descriptive statistics (means and SDs) accurately for each of the variables, to two decimal places, with proper italicization and spacing?

☐ Did I report the inferential statistics we used accurately? (depending on the lab, could be correlation coefficients or r, t-tests, ANOVAs, etc., in addition to degrees of freedom or *df* and *p*-values, and effect sizes).

☐ Did I clearly and briefly explain the meaning of each statistical test in plain English?

**Discussion**

☐ Do I have one clear and concise discussion paragraph that restates the initial hypothesis, summarizes and explains the key findings, and notes any weaknesses of the experimental design?