

**APA Format Starter Paper, Tailored to Lab Reports But Adaptable to Other Writing
Assignments**

Your Name Here

Your School

PSY 4321

Dr. Professor

April 20, 2024

Abstract

This is the abstract for this paper, wherein the main points of the introduction, method, results, and discussion are quickly talked about. Probably in more than one sentence, though. Dare I guess, more than two? There is a page break before starting the Introduction.

APA Format Starter Paper, Tailored to Lab Reports But Adaptable to Other Writing Assignments

Begin your paper with the introduction. The active voice, rather than the passive voice (i.e., the zombie voice), should be used in your writing.

This template is formatted according to the APA Style guidelines: one inch top, bottom, left, and right margins; Times New Roman font in 12 point; double-spaced; aligned flush left; and paragraphs indented. The page number appears one inch from the right edge on the first line of each page.

This template is written assuming a lab report situation, rather than other sorts of papers you may find yourself writing. This means that the headers are pre-filled with the normal blocks for that type of paper (e.g., method, results, etc.). If you are writing a different type of paper, you can just add, remove, or change the headings and subheadings as you need. For clarity, headings are the main paper parts (e.g., Introduction, Method, etc). Subheadings are the parts within those chunks (e.g., Participants, Materials, etc. in the Method). This is a bit easier to see in \LaTeX due to the way you interact with it and tell it what is going on.

Since the Introduction is where references in papers first show up, let us incorporate some now. There are some intricacies to be aware of when using \LaTeX to write your paper (yes, there is a \LaTeX command to make it look fancy like that, because of course there is). Referencing something **in text** is done by dropping the name in text with the year followed in parentheses; lucky for us \LaTeX handles it with the right command, like **Sample2024<empty citation>**. But maybe you want to just include it all at as a **parenthetical**? \LaTeX can do that as well (**FullBook2021**). For whatever reason, it does not seem like the multi-author work (**Multiauthor2020**) is working as it should, where it gives the full list the first time it is included in text, then truncates afterwards (**Multiauthor2020**). I am not sure what is up with that, so the best advice I can offer you is to do write out the first instance yourself, then let \LaTeX handle the rest. It sucks, I know. Such is the nature of the \LaTeX beast, sometimes.

As a formatting note, the References page needs to start on a new page. This *should be*

handled automatically by L^AT_EX, but it's still useful to know the format.

While I have your attention before diving into the sections, something that may slip by unnoticed is the L^AT_EX quirk about quotation marks. If you were to include a quote using the regular quotation marks, "it will look like this." However, the L^AT_EX specific way of doing it, that just gives it that little bit extra flair, is to use a double tick mark (on the tilde key up on the number row) to start the quote, and a double apostrophe to close it. That will make the quote “look like this instead.” They are “fun little guys” hugging your quote, instead of the "more bland marks" you get from the regular quotation marks.

To close out this section, I will finally talk about the contents of the Introduction. In these sorts of papers, think of the information process in the shape of an hourglass (stay with me, it'll make sense). The general idea is that you start at the broadest point, work your way into more and more specific, until you are at the point of this paper - the theory its testing and the hypothesis. Then you stay in that specific level of detail through the Methods and Results. The Discussion starts specific (i.e., what you did or did not find), then work your way back out to the broader meaning or implications.

Method

DELETE THIS SECTION - this is an informative section, not something to be included in your final paper.

I have tried to include the most I've seen asked of students in these papers. You may not need to fill out all of these boxes, in which case you can just delete them. Along with this subsection.

Also, I have seen many different combinations of these boxes - e.g., in one of my papers, I had a “participants and materials” section followed by a “procedure and measures,” but cannot remember why it was written that way. Maybe it is what the journal wanted? Moral of the story here: go with what the person who is making the decision about the quality of your paper wants. If they want everything in its own little box, do it. If they want some boxes combined, do that.

Just make sure you delete or comment out this subsection!

Participants

Talk about the people who participated in your study. How many students, sourced from where, reimbursed how, ethics assured by what?

Materials

What materials were used in the course of this experiment? Try to walk the line between being overly specific (i.e., “pens were standard Bic Clio Stic of medium thickness”) while still having enough detail someone else could read your paper and replicate what you used.

Sometimes it can be helpful to include the stimuli used in the experiment. For example, here is an example table (Table 1) of words that were used in this hypothetical experiment. If you make use of the label command, \LaTeX will handle numbering things for you.

Table 1

Sample words from this hypothetical experiment.

First word	Second word
Yeet	Yoink
Hot	Lit

Measures

This sets up what measure(s) you took during your experiment, including information about *how* those measures were gathered. Was it with some form of worksheet? Was it collected electronically? If electronic, was it through a website or something like E-Prime? If a keyboard was used, were there any specifics about the keys used?

Design

This is typically used to describe the conditions of the experiment. Did everyone experience the same things throughout the experiment, or were there counterbalances, such as for item order exposure, condition order exposure, conditions on days, etc.?

For undergrad research projects, lab instructors generally try to encourage students

towards easier projects, as analyzing a 3 x 2 x 5 experiment is rough, no matter how far along the academic process you are. So I would expect to see something more along the lines of a 2 (experimental manipulation) x 2 (order counterbalance) design.

Procedure

From the time the participant starts the experiment to the time they leave, what did they experience? After informed consent was obtained, what did they do? Or, in some cases, what did you do to them? *What did you do to them?* Make sure you highlight parts where things may deviate from the norm, such as in the debrief, needing to reveal to participants they hadn't been informed of the full nature of the experiment earlier as it would have impacted their ability to respond honestly or otherwise contaminated the data.

Results

Some instructors will want things broken down with the subheadings (e.g., 'Descriptive Statistics') I have included, some will light your paper on fire if you *do* include these. Always check with the assignment/rubric for what is wanted. Also, don't check my math on these, I am making all of the numbers up as we go, so it's almost certainly not going to hang together correctly.

I'll add this tip in here: since \LaTeX uses the percent symbol as the signal to comment out/hide what's typed after it in that line, what do you do if you need that symbol? You add what's called the 'escape character' in front of it - the backslash. So, it would look like this: 21%. Boom, you've got a percent symbol in text. Same goes for an ampersand: &.

Descriptive Statistics

In this portion, you describe the data obtained. This includes things like the counts, means, and standard deviations. This may be omitted or rolled into the rest of the statistical discussion, so as always, check with what is being asked of you. If it is wanted as a separate section, check to see if it would be acceptable to include things as a table, a figure, or if it would be better to write it out in text. We are going to use a figure.

Figure ?? shows the means and standard errors for the four experimental groups. As shown, the mean vibes for the second word ($M = 69$, $SE = 7.5$) were greater than the first word ($M = 42$, $SE = 3$), but roughly equivalent between presentation order conditions. Another fun little L^AT_EX thing here: your instructor may explicitly want you to use M , but one of L^AT_EX's strengths is the easy of "math mode" (i.e., everything enclosed by the dollar signs).

Inferential Statistics

This is where you start to do the actual statistical analysis. We generally tell students not to *interpret* what the results mean until the discussion, but pay attention when reading journal articles - realistically a bit of interpretation does tend to happen at this point in published works.

A benefit of using L^AT_EX is the ease in adding in macros to simplify your life. A common place I rolled these out in my dissertation were to make the formatting of all the analyses correct without a lot of work. I will include a couple example macros in the editor-side now, then use them in text. But, **another pro tip**: if you are going to deploy these macros, I would get in the habit of putting them up in the preamble so they are easier to find. Also, if you really get on board the L^AT_EX train (which you should), you can recycle the preamble between projects, so those macros will also come along for the ride.

Using the hypothetical experiment we have set up, let's say there was a significant interaction found between the word conditions (first versus second) and exposure order (first-second versus second-first), $F(11,111) = 4.20$, $p < .05$. Pairwise comparisons indicate that this was driven by the words themselves, as there was a significant difference between the words, $t(111) = 3.21$, $p < .05$, but not for the exposure order, $t(111) = .42$, $p > .05$.

Discussion

As mentioned at the close of the Introduction, the Discussion starts out specific before building out to the broader picture. This will typically mean that the discussion starts with a reiteration of the Results, with more emphasis on interpretation. What differences were (or were not) found? Does this support your predictions, or have you failed to reject the null hypothesis? Statements of that nature.

With that done, you can work to tie your findings into the existing literature. Perhaps this result supports the work of **Contributor2023<empty citation>** but contradicts others (**Sample2024**). Why might this be the case? What similarities or differences exist between your experiment and the other works that could explain the differences? Or if the results are similar, what does this mean for the core theory (e.g., demonstrates it held up with different stimuli, or in a different context, or with different timing, etc.).

It is also important to work in potential limitations of your work. Frequently in undergrad cognitive lab reports, this will involve the sample size. It can be hard to reach significance when you have a sample size of 10. Other common limitations can be things like the stimuli didn't work out as you had hoped, the participants didn't understand the experiment directions (or were savvy to what you were testing which biased their data), or things you notice in running the experiment that you would do differently if you redid it in the future.

Finally, close things out by reiterating the brief version of your findings, what it means for the theory you were testing, and what it could mean for future research. Happy writing!