# Final Paper Template\*

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#### Abstract

This is a template to write an academic paper in Quarto. In this space, you normally write the abstract, which is a summary of the paper in no more than 120-200 words.

<sup>\*</sup>Here you usually recognize the people who have given feedback to the paper. For some reason, research assistants are recognized in a separate sentence.

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#### 1 Introduction

Papers usually start with an introduction. See this link for some tips on how to write introductions.<sup>1</sup>

For our course, the introduction should be roughly composed of:

- One paragraph situating the big picture
- One paragraph introducing the article/study to be replicated
- One paragraph explaining what you do in terms of replication and why
- One paragraph summarizing the results

You will use citations throughout your paper. Citations by default are in Chicago style. For example, you can see Wickham (2016b) to learn more about working with R and RStudio. See here for more information on how to use other citation styles.

#### 2 Background, Data, and Research Design

In this section you explain in a bit more detail what the original piece did, with special attention to how the data was collected and analyzed. Remember to not only convey what they did, but also why.

You should wrap up this section by indicating which part of the original analysis you will be replicating, and then explain how you improve upon (or think it should be improved upon later).

<sup>&</sup>lt;sup>1</sup>You can also try the full URL: https://anthlittle.github.io/files/little\_intros.pdf. Oh, this is how you make footnotes.

### 3 Replication

This section should reproduce, to the best of your ability, the findings of the relevant parts of the original study. If there are any discrepancies, you should try to reason why these exist and how consequential they are.

You will want to include figures and tables in this section or other parts of the paper, here are a few pointers on how to incorporate them.

#### 3.1 Figures from R

Figure 1 shows how to plot a figure from R code. See Wickham (2016a) for more on how to make pretty plots.<sup>2</sup>

#### 3.2 Figures from external sources

Sometimes you may want to include a figure that was not made in R. Alternatively, when your data analysis becomes too cumbersome, you may want to save your figures in a separate file, and then import them. Figure 2 shows an example using a URL (you can replace this with a relative or absolute path in your computer). In practice, you would use the path of file in your working directory.

#### 3.3 Pipe tables

You can make tables "by hand" using pipe tables. Like Table 1 shows.

<sup>&</sup>lt;sup>2</sup>Notice how we use cross-reference to automate figure labels and citations.

### Penguin size, Palmer Station LTER

Flipper length and body mass for Adelie, Chinstrap and Gentoo Penguins

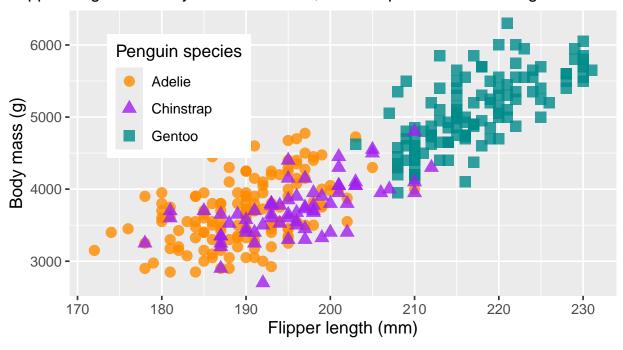


Figure 1: An example of how to make figures using ggplot2

Table 1: Demonstration of pipe table syntax

Default	Left	Right	Center
12	12	12	12
123	123	123	123
1	1	1	1

You can even use a Tables Generator to make them interactively and then copy and paste in your .qmd file.

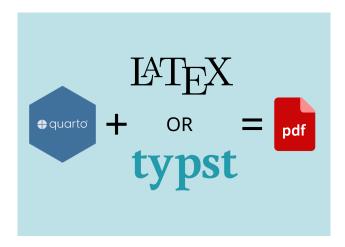


Figure 2: An example of how to plot an external figure

#### 3.4 Tables from R

Of course, you can also make tables in R and then print them in a nice format. I like to use the tinytable for simple tables.<sup>3</sup>

For example, Table 2 is made "by hand" with R code. Of course, you can also plot tidy data objects, like Table 3 shows.

 $<sup>^3</sup>$ You should also consider modelsummary for regression-like result tables.

Table 2: An example of a table made with tinytable

Default	Left	Right	Center
12	12	12	12
123	123	123	123
1	1	1	1

Table 3: An example of a table made from tidy data with tinytable

country	year	cases	population
Afghanistan	1999	745	19987071
Afghanistan	2000	2666	20595360
Brazil	1999	37737	172006362
Brazil	2000	80488	174504898
China	1999	212258	1272915272
China	2000	213766	1280428583

## 4 Extension/Discussion

In this section you will do at least one of two things:

- 1. Show additional analyses that correct or improve upon the original article. If you are making a methodological point, think about how it changes our understanding of the social or political phenomenon under study.
- 2. Discuss what should be done in future work to improve our understanding of the phenomenon under study. If you are not doing any additional analyses, your discussion should be both detailed in terms of what to do and realistic in terms of what could be done. Take this as an opportunity to think about how your next paper should look like.

#### 5 Conclusion

Conclude with roughly one paragraph summarizing what you did and the main takeaway of your paper, and then another paragraph explaining the significance for the field or future studies.

### 6 Supplementary Material

Include a link to a public GitHub repository with all the materials required to reproduce the analyses. You may also include a separate appendix file with additional analyses that are less central to your paper, but you still want to reference in the main text.

Include a statement like the one below to point out readers to your replication materials.

The data, code, and any additional materials required to replicate all analyses in this article are available at https://github.com/gustavo-diaz/ps403.

#### References

Wickham, Hadley. 2016a. *Ggplot2*. *Use R!* Springer International Publishing. https://doi. org/10.1007/978-3-319-24277-4.

——. 2016b. R for Data Science: Import, Tidy, Transform, Visualize, and Model Data.

Edited by Garrett Grolemund. First edition. Beijing: O'Reilly.