Title*

First Author† Second Author‡

February 10, 2025

Abstract

My abstract

*Note to title

†Position, Institution Contact: first.last@institution.edu

‡Position, Institution Contact: first.last@institution.ed

Contents

1 Introduction

LaTeXis not a WYSIWYG editor like Microsoft Word or Libre Office. Here your text and your formating of the document are separate tasks.

You write text with formating instructions and LaTeXwill take care of the formating for you. For example, we can decide to make some words **bold**, *italics*, underlined, or `monospaced`. If you want to link to a source on the internet you can do so with the `url` or `href` function. Either like this https://www.wikipedia.com or like this Wikipedia.

In LaTeX, you don't have to delete text, you can just use the % symbol to comment text out. It will still be visible in your editor (in a different color) but it won't render in the PDF. This is a super useful tool for writing and editing. Make use of it!

We can also make numbered lists:

1. My first item
2. My second item
3. My third item

We can also make non-numbered lists:

- My first item
- My second item
- My third item

We can also make our own lists. This works great for our hypotehese:

H1: My first item

H2: My second item

H3: My third item

2 Theory

We can also insert citations! This is an absolutely fanatstic feature of LaTeX, we can specify the way we want the citation to be added, the information is pulled in from the `bib` file we specified at the end of the document, and formatted correctly. We also get a nicely formated bibliography!

We can use the following commands:

1. `citep(key1)` (Smith, Doe and Johnson, 2020)
2. `citet(key1)` Smith, Doe and Johnson (2020)
3. `citeauthor(key1)` Smith, Doe and Johnson
4. `citeyear(key1)` 2020
5. `citep[text](key1)` (Smith, Doe and Johnson, 2020, pp.20)
6. `citep[text][text](key1)` (for example Smith, Doe and Johnson, 2020, pp.20)
7. `citep(key1, key2, key3)` (Smith, Doe and Johnson, 2020; Brown, 2018; Lee and Davis, 2019)

In order for this to work it is important that we have a bib file and correctly specify the path to the bib file at the end of this document. Basically any literature management software produces bib files for you. You can google where your LMS stores the bib file and then change the code at the bottom of the document.

And we can end `footnotes` into the text easily as well![1]

We can also insert direct quotes.

He said, "Hello" (Smith, Doe and Johnson, 2020, p. 10)

She replied, "Hi there!" (Smith, Doe and Johnson, 2020, p. 11)

Longer quotes can be inserted this way:

> "Nam liber tempor cum soluta nobis eleifend option congue nihil imperdiet doming id quod mazim placerat facer possim assum. Lorem ipsum dolor sit amet, consectetuer adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat. Ut wisi enim ad minim veniam, quis nostrud exerci tation ullamcorper suscipit lobortis nisl ut aliquip ex ea commodo consequat"(Smith, Doe and Johnson, 2020, p. 10).

[1] It's really easy!

3 Empirics

3.1 Methodology

While the integration of citations is already absolutely amazing LaTeXreally excels with more complex documents that have math, tables, and figures. For example, below is a small section of a manuscript I am working on. Here you can see how we can effortlessly integrate equations into our text!

In the individual split-sample regression models, all observations are now conditional on the respective value of z: $\mathbb{E}[Y_i \mid X, W, Z = 0] = \alpha_0 + \alpha_1 X_i + \boldsymbol{W}\boldsymbol{\alpha} + \epsilon_i$ and $\mathbb{E}[Y_i \mid X, W, Z = 1] = \gamma_0 + \gamma_1 X_i + \boldsymbol{W}\boldsymbol{\gamma}_+ \epsilon_i$. The split-sample models with covariates in this scenario might look very similar to the interactive model with covariates, but they are not. Instead, since all observations are conditional on the value of z in their split the mathematically equivalent interactive model to the new split-sample models is a fully interacted model in which the splitting variable z is interacted with x as well as every w_j in $\boldsymbol{W}$:

$$\mathbb{E}[Y_i \mid X, Z] = \beta_0 + \beta_1 X_i + \beta_2 Z_i + \beta_3 X_i Z_i + \sum_{j=1}^{k} (\tau_j \boldsymbol{W}_{j,i} + \delta_j \boldsymbol{W}_{j,i} Z_i) + \epsilon_i \tag{1}$$

where τ_j are the coefficients for each covariate, w_j when $z = 0$. δ_j are the coefficients for the interaction terms between z and each covariate w_j, indicating how w_j changes depending on the value of z. Each w_j has its own coefficient τ_j, which represents its effect when $z = 0$. Each interaction term $w_j z$ has a coefficient δ_j, which represents the additional effect of w_j when $z = 1$.

3.2 Data

Table 1: Summary Statistics

	Unique (#)	Missing (%)	Mean	SD	Min	Median	Max
rr_scale	18	0	8.5	4.2	0.0	8.0	16.0
pid7	8	0	4.2	2.3	1.0	4.0	7.0
pk_index	5	0	0.4	0.3	0.0	0.5	1.0
income	27	0	12.4	7.5	1.0	11.0	26.0
age	74	0	48.9	16.8	18.0	49.0	110.0
educ	8	0	4.0	1.7	1.0	4.0	8.0
male	2	0	0.5	0.5	0.0	0.0	1.0
knows_immigrants	3	0	0.6	0.5	0.0	1.0	1.0
viol2a	7	0	4.9	3.3	1.0	8.0	8.0
selfmon4	7	0	5.3	1.8	1.0	5.0	9.0

4 Results

4.1 Tables

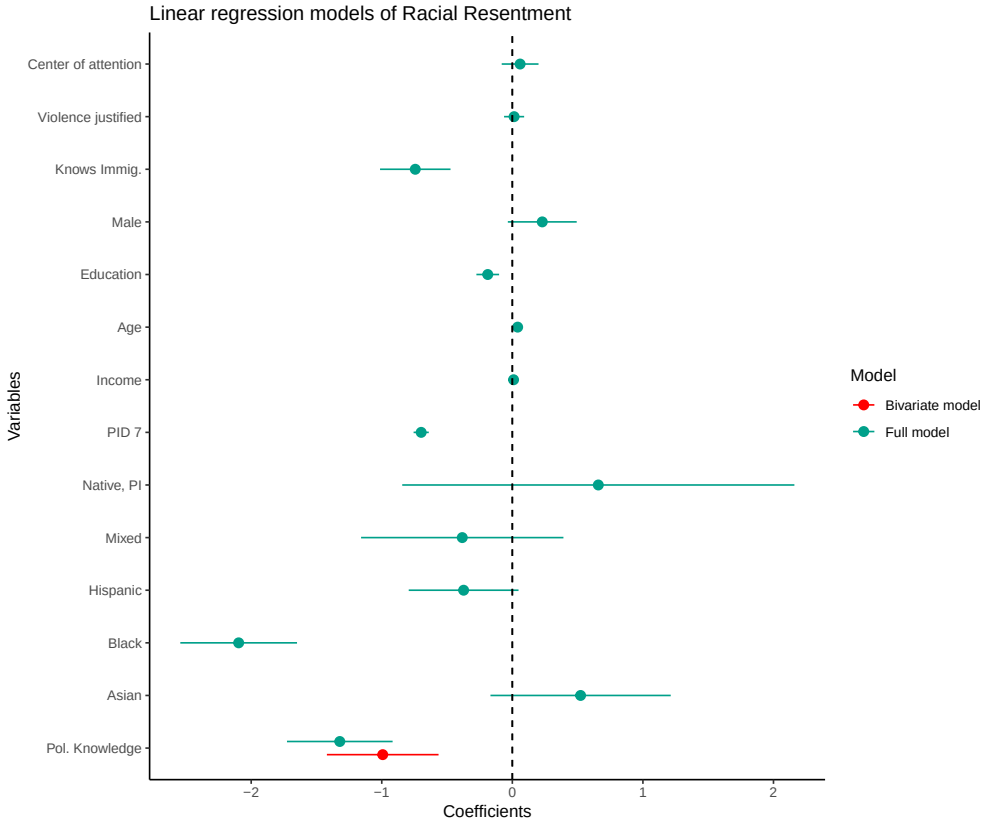
Table 2: Linear Regression Results

	Bivariate model	Full model
(Intercept)	8.914***	10.834***
	(0.120)	(0.656)
Pol. Knowledge	−0.993***	−1.321***
	(0.218)	(0.206)
Asian		0.523
		(0.352)
Black		−2.096***
		(0.228)
Hispanic		−0.373
		(0.214)
Mixed		−0.384
		(0.395)
Native, PI		0.658
		(0.766)
PID 7		−0.698***
		(0.030)
Income		0.010
		(0.010)
Age		0.041***
		(0.004)
Education		−0.188***
		(0.044)
Male		0.229
		(0.135)
Knows Immig.		−0.743***
		(0.138)
Violence justified		0.013
		(0.039)
Center of attention		0.059
		(0.072)
Num.Obs.	3073	3061
R2	0.007	0.274

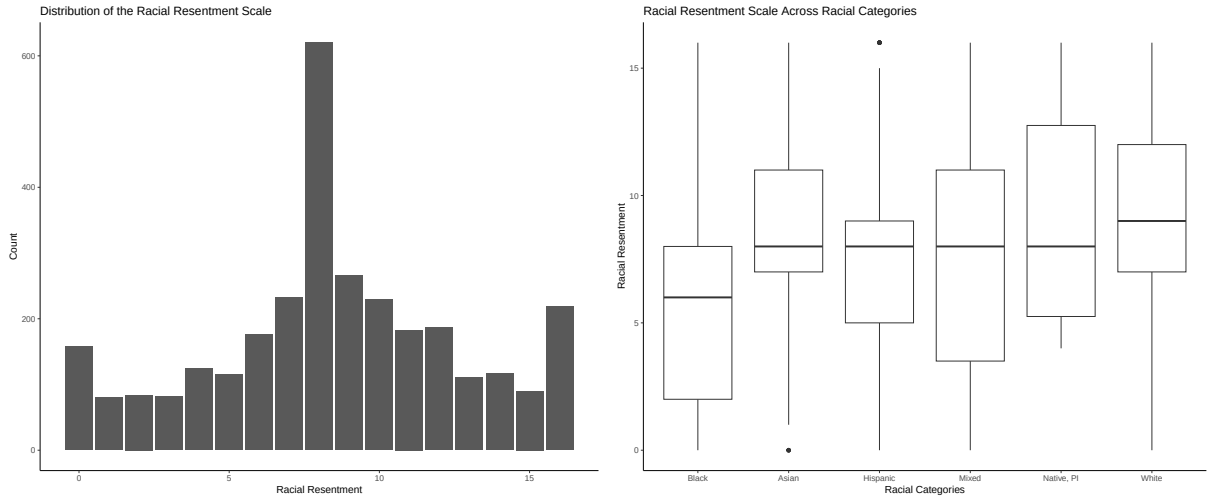
4.2 Figures

Inserting figures is also super easy! We can do it with the `figure` environment. The code below searches for a pdf in the figures folder and automatically inserts it. We also specify the caption and the label of the figure. Labels allow us to reference to things in our document. We have added section lables so we can reference to Section 4.2 or Figure 2 or Table 2.

Figure 1: Coefficient Plot for the Models in Table 2 Column 1-2



We can also display figures next to each other with the `minipage` environment! In Figure 2 we can see a bar plot of racial resentment in the ANES Pilot 2020 study in Panel 2a and a boxplot of the racial resentment across racialm groups in Panel 2b.



(a) One subfigure

(b) The other subfigure

Figure 2: Overlaid Images

5 Discussion

You can also input other LaTeXdocuments! This will allow you to write longer documents in spearate parts. I highly recommend you design your Ph.D. dissertation this way. One main document that has your LaTeXpreamble and inputs all your chapters. You don't need to add the preamble or the bibliography information to the individual documents. Just start with a heading and write your chapter. The next chapter is then a different tex file.

5.1 Text below comes from a different tex document

Lorem ipsum dolor sit amet, consetetur sadipscing elitr, sed diam nonumy eirmod tempor invidunt ut labore et dolore magna aliquyam erat, sed diam voluptua. At vero eos et accusam et justo duo dolores et ea rebum. Stet clita kasd gubergren, no sea takimata sanctus est Lorem ipsum dolor sit amet. Lorem ipsum dolor sit amet, consetetur sadipscing elitr, sed diam nonumy eirmod tempor invidunt ut labore et dolore magna aliquyam erat, sed diam voluptua. At vero eos et accusam et justo duo dolores et ea rebum. Stet clita kasd gubergren, no sea takimata sanctus est Lorem ipsum dolor sit amet. Lorem ipsum dolor sit amet, consetetur sadipscing elitr, sed diam nonumy eirmod tempor invidunt ut labore et dolore magna aliquyam erat, sed diam voluptua. At vero eos et accusam et justo duo dolores et ea rebum. Stet clita kasd gubergren, no sea takimata sanctus est Lorem ipsum dolor sit amet.

Duis autem vel eum iriure dolor in hendrerit in vulputate velit esse molestie consequat, vel illum dolore eu feugiat nulla facilisis at vero eros et accumsan et iusto odio dignissim qui blandit praesent luptatum zzril delenit augue duis dolore te feugait nulla facilisi. Lorem ipsum dolor sit amet, consectetuer adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat (Garcia and Rodriguez, 2022; Wilson, 2021).

Ut wisi enim ad minim veniam, quis nostrud exerci tation ullamcorper suscipit lobortis nisl ut aliquip ex ea commodo consequat. Duis autem vel eum iriure dolor in hendrerit in vulputate velit esse molestie consequat, vel illum dolore eu feugiat nulla facilisis at vero eros et accumsan et iusto odio dignissim qui blandit praesent luptatum zzril delenit augue duis dolore te feugait nulla facilisi (Lee and Davis, 2019).

Nam liber tempor cum soluta nobis eleifend option congue nihil imperdiet doming id quod mazim placerat facer possim assum. Lorem ipsum dolor sit amet, consectetuer adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat. Ut wisi enim ad minim veniam, quis nostrud exerci tation ullamcorper suscipit lobortis nisl ut aliquip ex ea commodo consequat.

References

Brown, Emily. 2018. *A Comprehensive Guide to Statistical Analysis*. Academic Press.

Garcia, Maria and Carlos Rodriguez. 2022. "New Developments in Quantum Computing." *Physical Review Letters* 128(10):100501.

Lee, Michael and Sarah Davis. 2019. Machine Learning for Natural Language Processing. In *Proceedings of the ACL Conference*. pp. 456–478.

Smith, John, Jane Doe and David Johnson. 2020. "The Impact of Social Media on Political Discourse." *Journal of Communication* 70(2):123–145.

Wilson, Robert. 2021. "The Latest Research on Climate Change." Online Report.
URL: *https://www.example.com/climatereport.pdf*