My first replicable Paper

MyFirstName MyLastName
Evans School of Public Policy and Governance
University of Washington
Seattle, WA 98115, <u>United States</u>
`greatguy@uw.edu`

February 7, 2020

Abstract

This is an example on how to make a reproducible paper. We are using R from Rstudio, creating an RSweave document. This is a nice start to create a nice paper and get an A+. The next sections will show the steps taken.

1   Introduction

This is my intro to my great paper, I will explain the cool things I can do with my new 'computational thinking' powers combined with some Latex. This is my intro to my great paper, I will explain the cool things I can do with my new 'computational thinking' powers combined with some Latex. This is my intro to my great paper, I will explain the cool things I can do with my new 'computational thinking' powers combined with some Latex. This is my intro to my great paper, I will explain the cool things I can do with my new 'computational thinking' powers combined with some Latex.

This is my nice intro to my great paper, I will explain the cool things I can do with my new 'computational thinking' powers combined with some Latex.

2 Exploring Data

Sections may use a label[1]. This label is needed for referencing. For example the next section has label *datas*, so you can reference it by writing: As we see in section 2.1.

2.1 Exploring Categorical Data

Here, I continue doing this nice work, I hope you like it and read it. It has been a very hard work.Here, I continue doing this nice work, I hope you like it and read it. It has been a very hard work.Here, I continue doing this nice work, I hope you like it and read it. It has been a very hard work.Here, I continue doing this nice work, I hope you like it and read it. It has been a very hard work.Here, I continue doing this nice work, I hope you like it and read it. It has been a very hard work.Here, I continue doing this nice work, I hope you like it and read it. It has been a very hard work.

You can see the statistics of categorical variables in Table 1.

Table 1: Freq Table

Variable	Levels	n	%	$\sum\%$
Region	Africa	55	27.1	27.1
	Asia	45	22.2	49.3
	Eurasia	6	3.0	52.2
	Europe	45	22.2	74.4
	NAmerica	26	12.8	87.2
	Oceania	14	6.9	94.1
	SAmerica	12	5.9	100.0
	all	203	100.0	
ONIpolitical	nd	2	2.6	2.6
	per	8	10.5	13.2
	sub	4	5.3	18.4
	sel	21	27.6	46.0
	ne	41	54.0	100.0
	all	76	100.0	

You can see this variable plotted in Figure 1

---

[1]In fact, you can have a label wherever you think a future reference to that content might be needed.
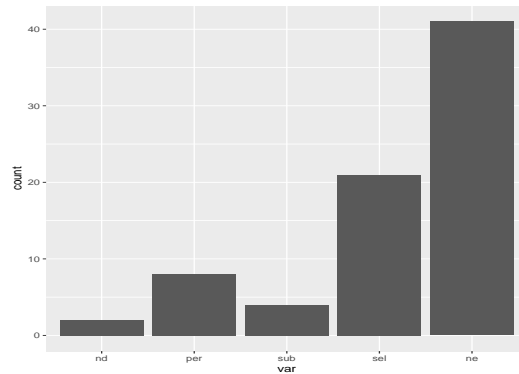
Figure 1: ONI barplot

2.2 Exploring Numerical Data

Here, I continue doing this nice work, I hope you like it and read it. It has been a very hard work.Here, I continue doing this nice work, I hope you like it and read it. It has been a very hard work.Here, I continue doing this nice work, I hope you like it and read it. It has been a very hard work.Here, I continue doing this nice work, I hope you like it and read it. It has been a very hard work.Here, I continue doing this nice work, I hope you like it and read it. It has been a very hard work.Here, I continue doing this nice work, I hope you like it and read it. It has been a very hard work.Here, I continue doing this nice work, I hope you like it and read it. It has been a very hard work.Here, I continue doing this nice work, I hope you like it and read it. It has been a very hard work.Here, I continue doing this nice work, I hope you like it and read it. It has been a very hard work.

Table 2: Stat summary for nummeric vars

Statistic	Median	Mean	Min	Max	Pctl(25)	Pctl(75)	St. Dev.
FHF	49.00	47.24	10.00	97.00	25.25	63.00	23.72
RWB	28.72	32.40	6.38	84.83	23.60	38.50	16.64

In the Table 2, you realize that the mean of FHF is **47.2424242424242**. Boxplots were introduced by Tuckey (Tukey, 1977).
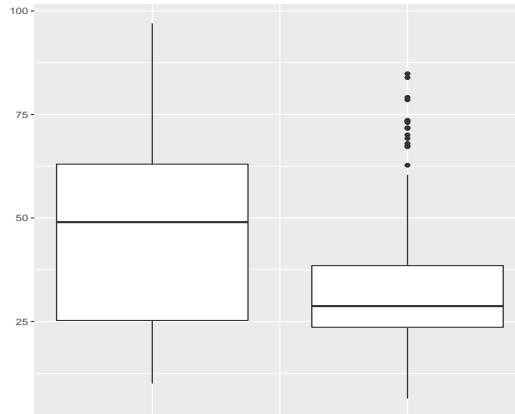
Figure 2: boxplots

3 Looking for Relationships

Here, I continue doing this nice work, I hope you like it and read it. It has been a very hard work.Here, I continue doing this nice work, I hope you like it and read it. It has been a very hard work.Here, I continue doing this nice work, I hope you like it and read it. It has been a very hard work.Here, I continue doing this nice work, I hope you like it and read it. It has been a very hard work.Here, I continue doing this nice work, I hope you like it and read it. It has been a very hard work.Here, I continue doing this nice work, I hope you like it and read it. It has been a very hard work.Here, I continue doing this nice work, I hope you like it and read it. It has been a very hard work.Here, I continue doing this nice work, I hope you like it and read it. It has been a very hard work.Here, I continue doing this nice work, I hope you like it and read it. It has been a very hard work.

3.1 Numerical and Categorical

Here, I continue doing this nice work, I hope you like it and read it. It has been a very hard work.Here, I continue doing this nice work, I hope you like it and read it. It has been a very hard work.Here, I continue doing this nice work, I hope you like it and read it. It has been a very hard work.Here, I continue doing this nice work, I hope you like it and read it. It has been a very hard work.Here, I continue doing this nice work, I hope you like it and read it. It has been a very hard work.Here, I continue doing this nice work, I hope you like it and read it. It has been a very hard work.Here, I continue
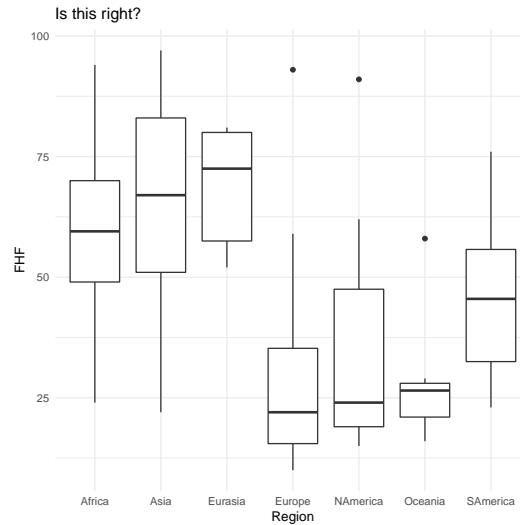
Figure 3: Boxplots: one numerical by a category.

doing this nice work, I hope you like it and read it. It has been a very hard work.Here, I continue doing this nice work, I hope you like it and read it. It has been a very hard work.Here, I continue doing this nice work, I hope you like it and read it. It has been a very hard work.

3.2 Numerical and Numerical

Here, I continue doing this nice work, I hope you like it and read it. It has been a very hard work.Here, I continue doing this nice work, I hope you like it and read it. It has been a very hard work.Here, I continue doing this nice work, I hope you like it and read it. It has been a very hard work.Here, I continue doing this nice work, I hope you like it and read it. It has been a very hard work.Here, I continue doing this nice work, I hope you like it and read it. It has been a very hard work.Here, I continue doing this nice work, I hope you like it and read it. It has been a very hard work.Here, I continue doing this nice work, I hope you like it and read it. It has been a very hard work.Here, I continue doing this nice work, I hope you like it and read it. It has been a very hard work.Here, I continue doing this nice work, I hope you like it and read it. It has been a very hard work.

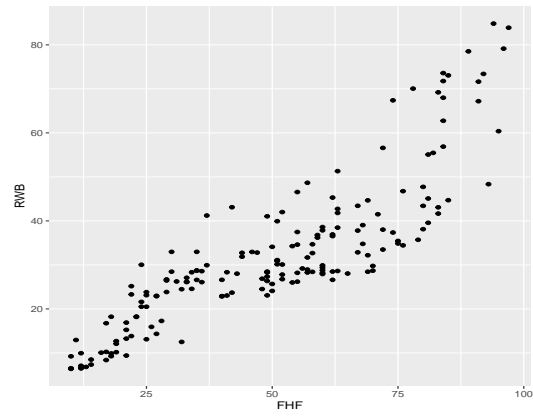The scatter plot is thought to be invented by John Frederick W. Herschel (Friendly & Denis, 2005)

5

Figure 4: scatter

4   My Regression

This is a Regression in R:

```
> regre1=lm(FHF~RWB,data=dataidx)
```

This is another:

```
> regre2=lm(FHF~RWB+ONIpolitical,data=dataidx)
```

These is a better summary, and for both:

Table 3: Regression Models

	Dependent variable:	
	FHF	
	(1)	(2)
RWB	1.198***	1.061***
	(0.054)	(0.109)
ONIpolitical.L		2.897
		(7.114)
ONIpolitical.Q		−11.366*
		(5.888)
ONIpolitical.C		−3.126
		(4.239)
ONIpolitical^4		2.910
		(5.119)
Constant	11.104***	18.087***
	(1.979)	(6.230)
Observations	178	76
R^2	0.735	0.757
Adjusted R^2	0.734	0.739
Residual Std. Error	12.049 (df = 176)	12.146 (df = 70)
F Statistic	488.606*** (df = 1; 176)	43.529*** (df = 5; 70)

Note:	*p<0.1; **p<0.05; ***p<0.01

I hope you like what you see in the Table 3.

$$P(x) = \frac{1}{\sigma\sqrt{2\pi}} e^{-(x-\mu)^2/2\sigma^2}$$

References

Friendly, M., & Denis, D. (2005). The early origins and development of the scatterplot. *Journal of the History of the Behavioral Sciences*, *41*(2), 103–130. Retrieved 2020-02-07, from `http://doi.wiley.com/10.1002/jhbs.20078` doi: 10.1002/jhbs.20078

Tukey, J. W. (1977). *Exploratory Data Analysis by John W. Tukey* (1edition ed.). Pearson.