Intro to Social Science Data Analysis

Seminar 4: Replication!

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Assignment 2

Due: Friday 19 October

Describe at least **3** variables in a data set.

You need to select a **range of descriptive statistical tools**. The tools should include both **numerical descriptive statistics** and **graphics**.

These tools should describe the variables':

- central tendency,
- variation,
- their relationships with the other variables.

The descriptions need to be discussed **in paragraph form**.

The description must be **reproducible**. So you should email me the link to a Dropbox folder with:

- the `.csv` data set,
- the `.Rmd` R markdown file,
- the final `.html` file.

Not Replicated

What does it mean if an independent researcher is not able to replicate a study's findings?

Knitting

Briefly explain what the knitting process is.

Why does it make research more reproducible?

Create a **website** hosted on Dropbox.

The website should be created using R Markdown.

It should include:

- 3 headers
- An evaluated code chunk
- A non-evaluated code chunk
- A right-aligned plot, where the source code is not show.
- A URL link
- A table
- **Bonus:** an equation

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Automatically Include Tables with xtable

We can use the *xtable* package and the `print` command to **automatically include** tables in our R Markdown documents.

We can create tables from data frames and many other object types.

```r
# Load package
library(xtable)

# Create data frame object
Population <- c(14.3, 6.3, 66.7)

Countries <- c("Cambodia", "Laos", "Thailand")

NewData <- data.frame(Countries, Population)
```

Use the option `results='asis'`:

```
```{r, results='asis'}
```

And this code:

```
print(xtable(NewData), type = "html")
```

To get this table:

	Countries	Population
1	Cambodia	14.30
2	Laos	6.30
3	Thailand	66.70
```

Another Example

For another example see:

`http://bit.ly/SBGHLE`.