

R.Camp - Homework 3

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```
library(xtable)
```

```
## Warning: package 'xtable' was built under R version 3.5.2
```

```
library(stargazer)
```

```
##
```

```
## Please cite as:
```

```
## Hlavac, Marek (2018). stargazer: Well-Formatted Regression and Summary Statistics Tables.
```

```
## R package version 5.2.2. https://CRAN.R-project.org/package=stargazer
```

Homework 3

Simulation exercise

In this experimental design, I am interested in exploring how much do citizens value democratic liberties and rights depending on the level of exposure to violence. The motivation is precisely to see if violent conditions affect or transform the political attitudes of individuals. The experiment consists of randomly assign half the group to the treatment and the other half to the control group. Subjects in both groups will be given information about the scenario where they live. Control group will be told that they live in relatively safe cities, low crime rates and access to basic social services. Treatment group on the contrary will receive a description of a war zone. After the reading the prompt, subjects will be asked to assess how much they value different political rights. For instance, they will be asked, in a scale from 0 to 100%, how important it's freedom of expression for them.

Variables Dependent variable: numeric assessment of democratic rights.

Treatment variable: whether or not they live in a conflict zone.

Simulation code

```
set.seed(234)
```

```
N=40
```

```
zone <- rbinom(n=N, 1, 0.5)
```

```
eval <- rnorm(n=N, mean = 0, sd= 1)
```

```
a = 0.7
```

```
b = 4
```

```
b2 = 2
```

```
tef = -5
```

```
e = rnorm(n=N, mean = 0, sd=1)
```

```
safe <- a + tef*0 + (b*zone) + (b2*eval) + e
violent <- a + tef*1 + (b*zone) + (b2*eval) + e

population <- data.frame(safe, violent, zone, eval)
head(population)
```

```
##           safe    violent zone      eval
## 1 5.7732909 0.7732909    1 0.2053518
## 2 6.9643503 1.9643503    1 1.0162833
## 3 1.9312794 -3.0687206    0 0.4089990
## 4 3.7747896 -1.2252104    1 -0.7052355
## 5 0.2355437 -4.7644563    0 0.2356143
## 6 5.4693853 0.4693853    1 0.3451300
```

```
t <- ifelse(runif(N)<=0.5, 1, 0)
population$Y_obs <- t*population$safe + (1-t)*population$violent
population$status <- ifelse(t==1, "Treated", "Control")
head(population)
```

```
##           safe    violent zone      eval    Y_obs status
## 1 5.7732909 0.7732909    1 0.2053518 0.7732909 Control
## 2 6.9643503 1.9643503    1 1.0162833 6.9643503 Treated
## 3 1.9312794 -3.0687206    0 0.4089990 -3.0687206 Control
## 4 3.7747896 -1.2252104    1 -0.7052355 3.7747896 Treated
## 5 0.2355437 -4.7644563    0 0.2356143 0.2355437 Treated
## 6 5.4693853 0.4693853    1 0.3451300 0.4693853 Control
```

Plotting the simulation

```
boxplot(population$Y_obs[population$status=="Treated"],
        population$Y_obs[population$status=="Control"],
        names=c("Treated", "Control"))
```

