Data Analysis_HB_r, format(Sys.time(), '%d%m%Y'))

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??YAML

Descriptive Statistics

Following are relevant aggregated statistics and statistics by each of the 11 treatments for each of three relevant dependent variables. These relevant dependent variables are 1. Donation, which is the amount the subject donated in order to retire emission rights 2. Donated, which is equal to 1 if the subject donated a positive amount, and 0 otherwise 3. Belief, which is the amount the subject thinks other participants in this experiment donated on average (not incentivized)

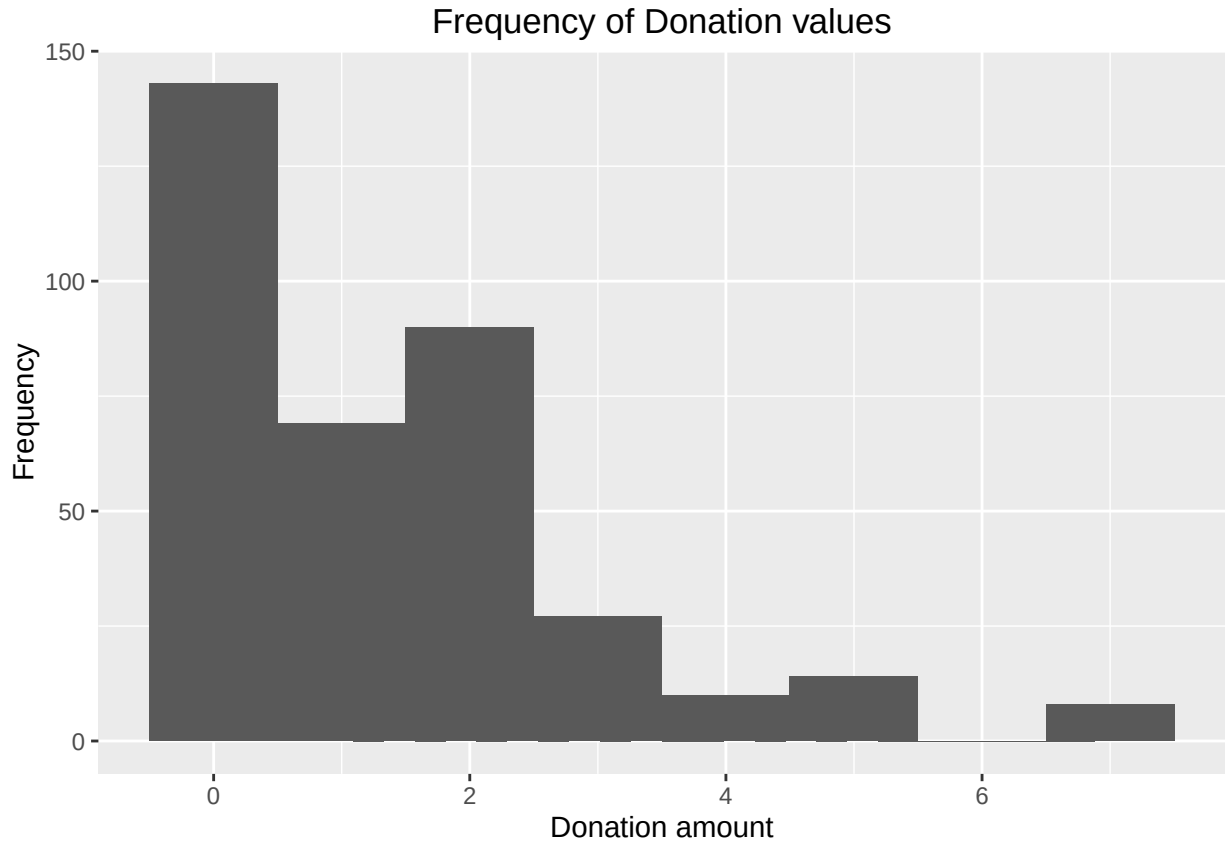
1. Variable: Donation to retire carbon licenses

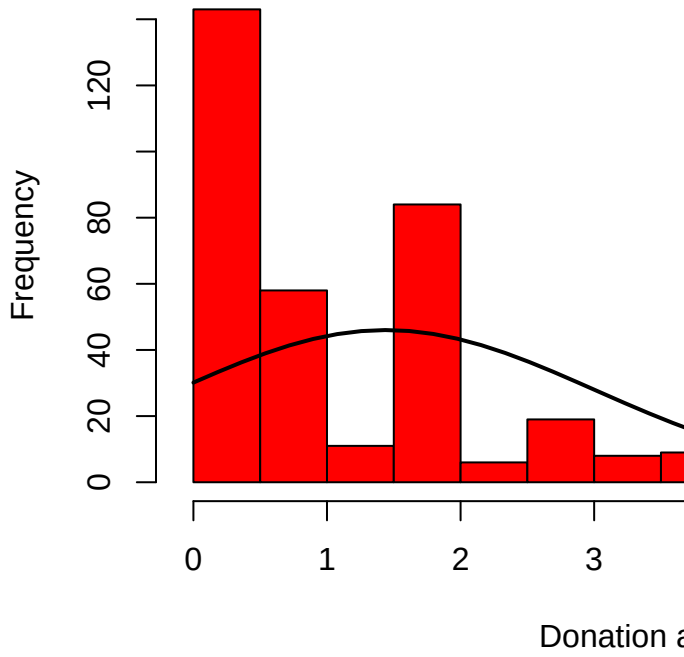
Aggregated descriptive statistics

```
##    Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##    0.00    0.00    1.00    1.44    2.00    7.00
```

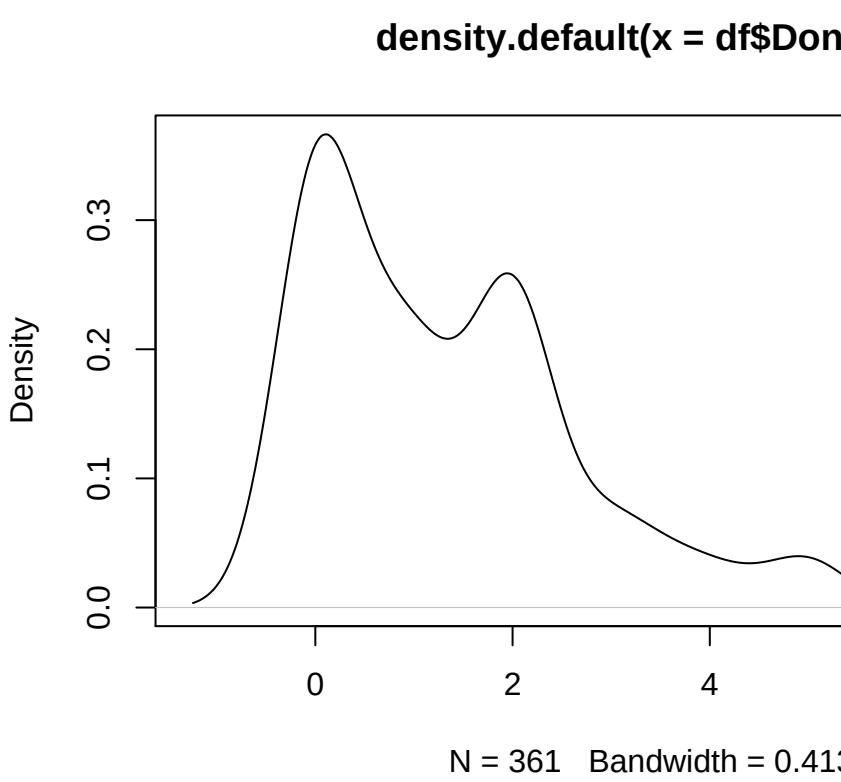
```
## [1] 1.56474
```

Distribution of aggregated donations





Distribution of aggregated donations with normal curve

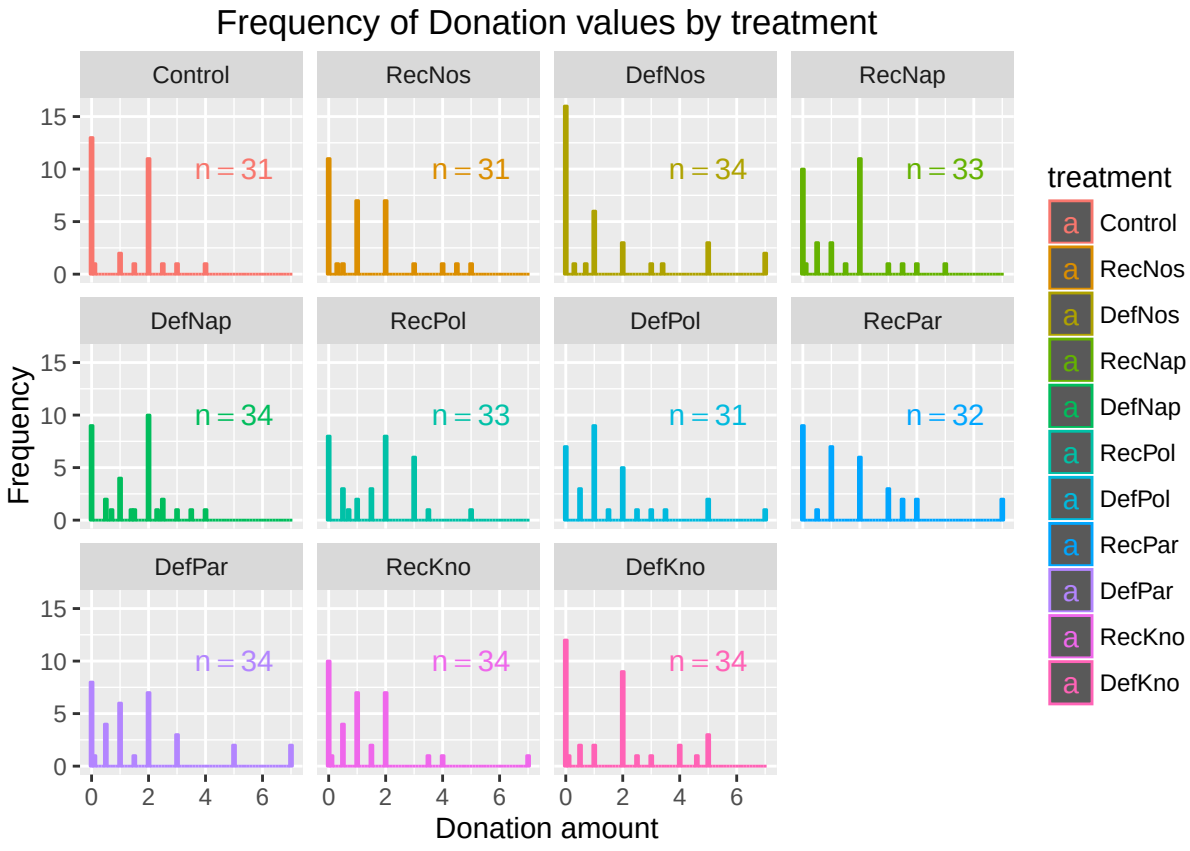


Kernel density plot of aggregated donations

Distribution of donations by treatment

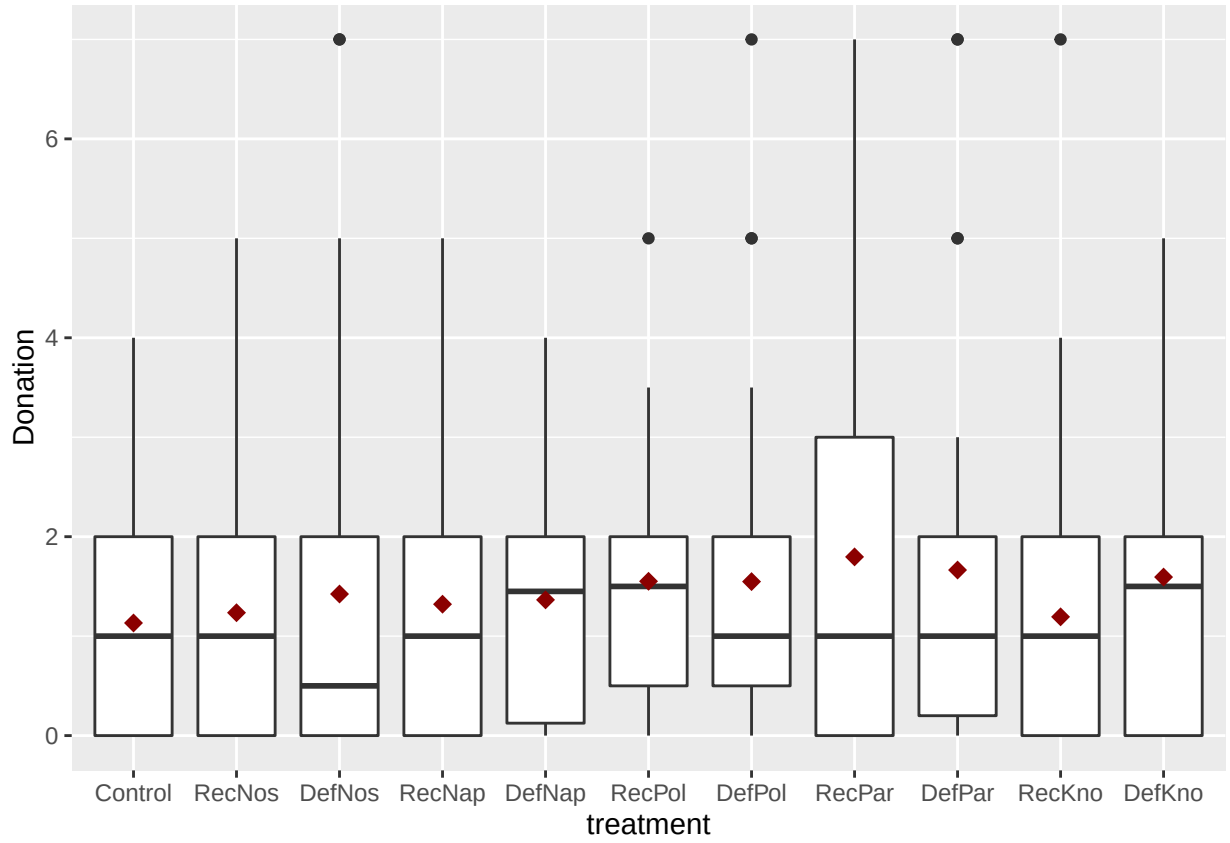
```
## group: Control
##   vars  n mean   sd median trimmed  mad min max range skew kurtosis   se
## 1    1 31 1.13 1.15      1    1.02 1.48   0   4     4 0.42    -0.94 0.21
## ------------------------------------------------------------
## group: RecNos
##   vars  n mean   sd median trimmed  mad min max range skew kurtosis   se
## 1    1 31 1.24 1.39      1    0.99 1.48   0   5     5 1.14     0.52 0.25
## ------------------------------------------------------------
## group: DefNos
##   vars  n mean   sd median trimmed  mad min max range skew kurtosis   se
## 1    1 34 1.42 2.08    0.5    1.05 0.74   0   7     7 1.46     0.93 0.36
## ------------------------------------------------------------
## group: RecNap
##   vars  n mean   sd median trimmed  mad min max range skew kurtosis   se
## 1    1 33 1.32 1.31      1    1.15 1.48   0   5     5 0.83     0.13 0.23
## ------------------------------------------------------------
## group: DefNap
##   vars  n mean   sd median trimmed  mad min max range skew kurtosis   se
## 1    1 34 1.36 1.11   1.45    1.28 1.19   0   4     4  0.3    -0.81 0.19
## ------------------------------------------------------------
## group: RecPol
##   vars  n mean  sd median trimmed  mad min max range skew kurtosis   se
## 1    1 33 1.55 1.3    1.5    1.47 1.48   0   5     5 0.46     -0.5 0.23
```

```
## ------------------------------------------------------------
## group: DefPol
##   vars  n mean   sd median trimmed  mad min max range skew kurtosis  se
## 1    1 31 1.55 1.68      1    1.24 1.48   0   7     7 1.55     2.05 0.3
## ------------------------------------------------------------
## group: RecPar
##   vars  n mean   sd median trimmed  mad min max range skew kurtosis   se
## 1    1 32  1.8 1.88      1    1.52 1.48   0   7     7 1.23      1.1 0.33
## ------------------------------------------------------------
## group: DefPar
##   vars  n mean   sd median trimmed  mad min max range skew kurtosis   se
## 1    1 34 1.66 1.89      1    1.34 1.48   0   7     7 1.46     1.49 0.32
## ------------------------------------------------------------
## group: RecKno
##   vars  n mean   sd median trimmed  mad min max range skew kurtosis   se
## 1    1 34 1.19 1.45      1    0.93 1.48   0   7     7 2.07     5.36 0.25
## ------------------------------------------------------------
## group: DefKno
##   vars  n mean  sd median trimmed  mad min max range skew kurtosis   se
## 1    1 34 1.59 1.7    1.5     1.4 2.22   0   5     5 0.73    -0.74 0.29
```



Donations by treatment (Boxplot)

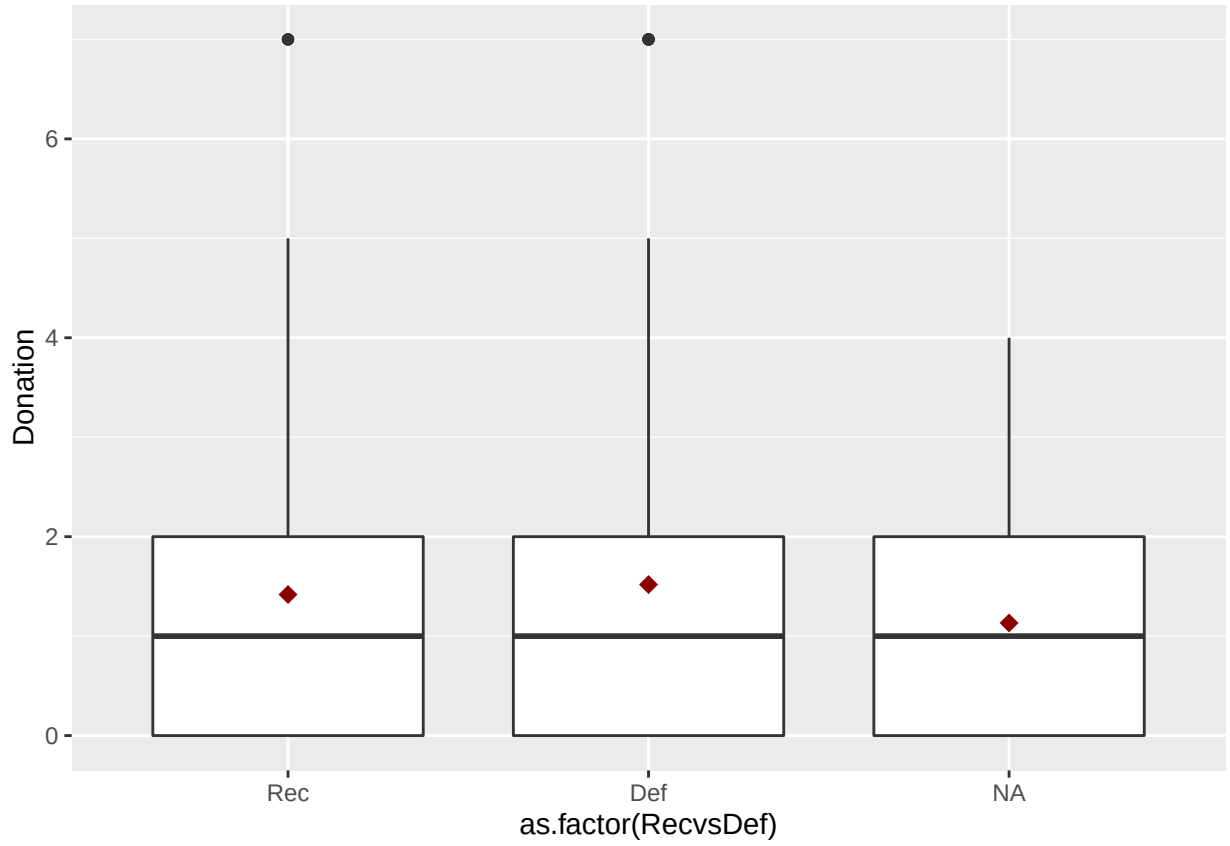
Red diamonds in boxplots represent the respective means



Donations by aggregated treatment (Boxplot), i.e. Def vs. Rec vs. Control

```
describeBy(df$Donation, df$RecvsDef)
```

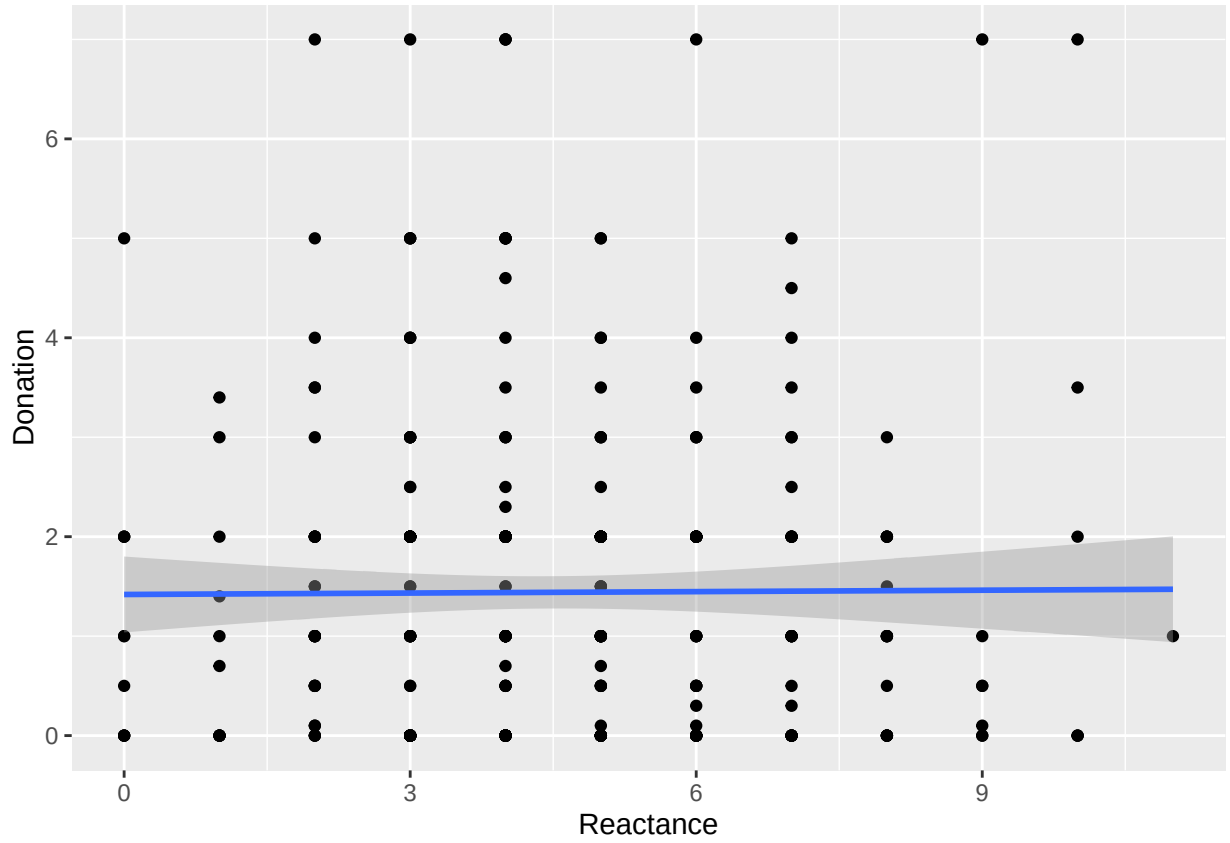
```
## group: Rec
##   vars   n mean   sd median trimmed  mad min max range skew kurtosis   se
## 1    1 163 1.42 1.48      1     1.2 1.48   0   7     7 1.36     2.27 0.12
## ------------------------------------------------------------
## group: Def
##   vars   n mean   sd median trimmed  mad min max range skew kurtosis   se
## 1    1 167 1.52 1.71      1    1.21 1.48   0   7     7  1.4     1.63 0.13
```



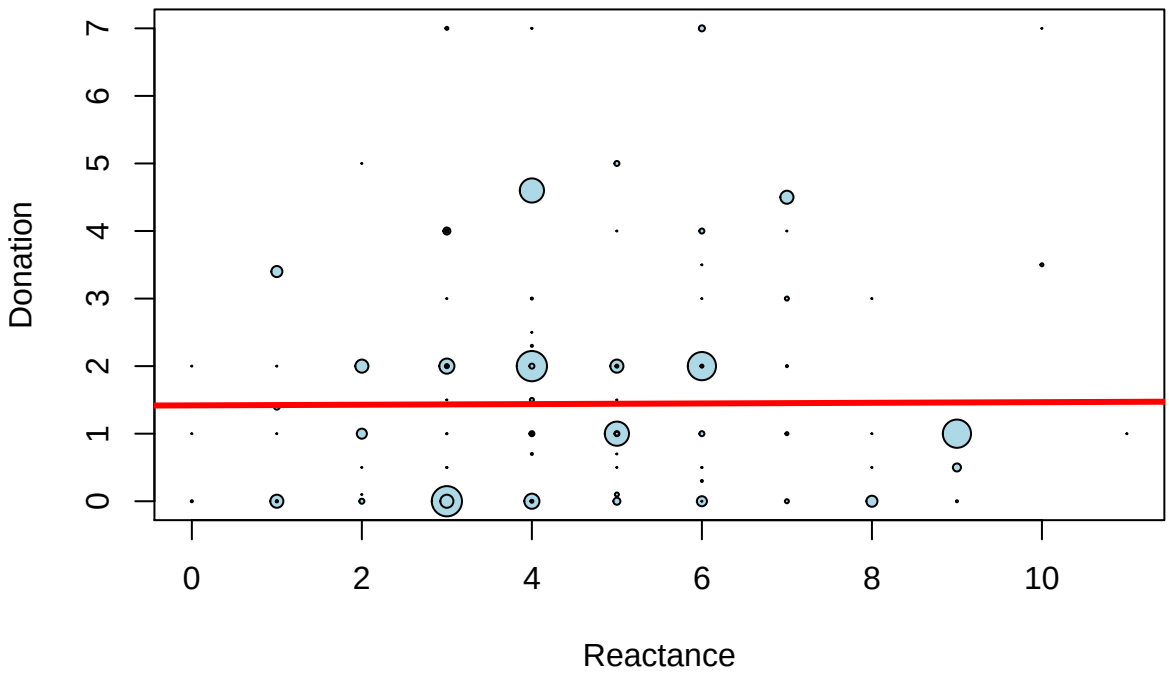
Donations by Reactance score

The reactance score was constructed by changing each of the 11 rectance-items to a dummy variable equal to 1 if the subject chose 3 or 4 on the respective item, and 0 otherwise. Afterwards, all 11 dummies were added to construct an ordinal Reactance score.

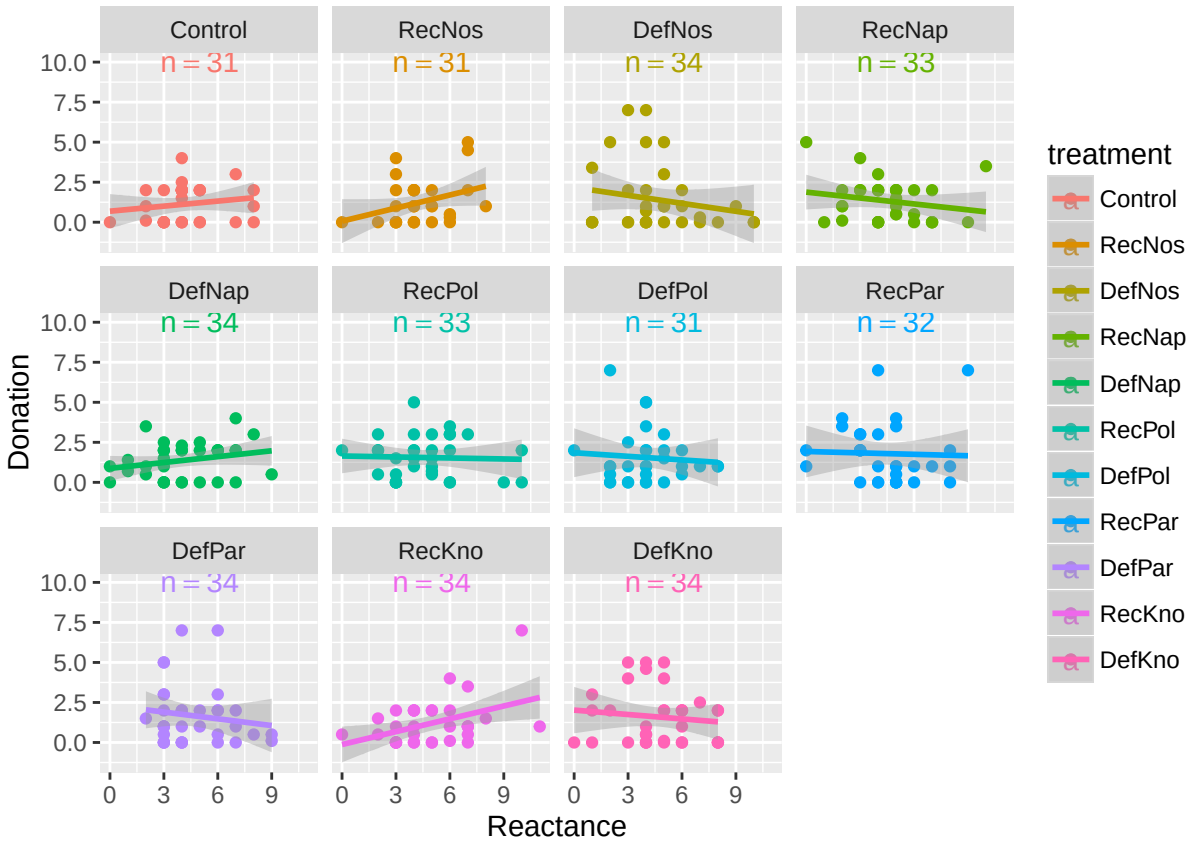
Shows a point plot (not jittered) with Donation amount and the respective Reactance score of each participant. Includes a linear regression line, including the 95% confidence region, of the Reactance score as a predictor for the Donation amount.



To see how often combinations of Reactance and Donation scores appeared



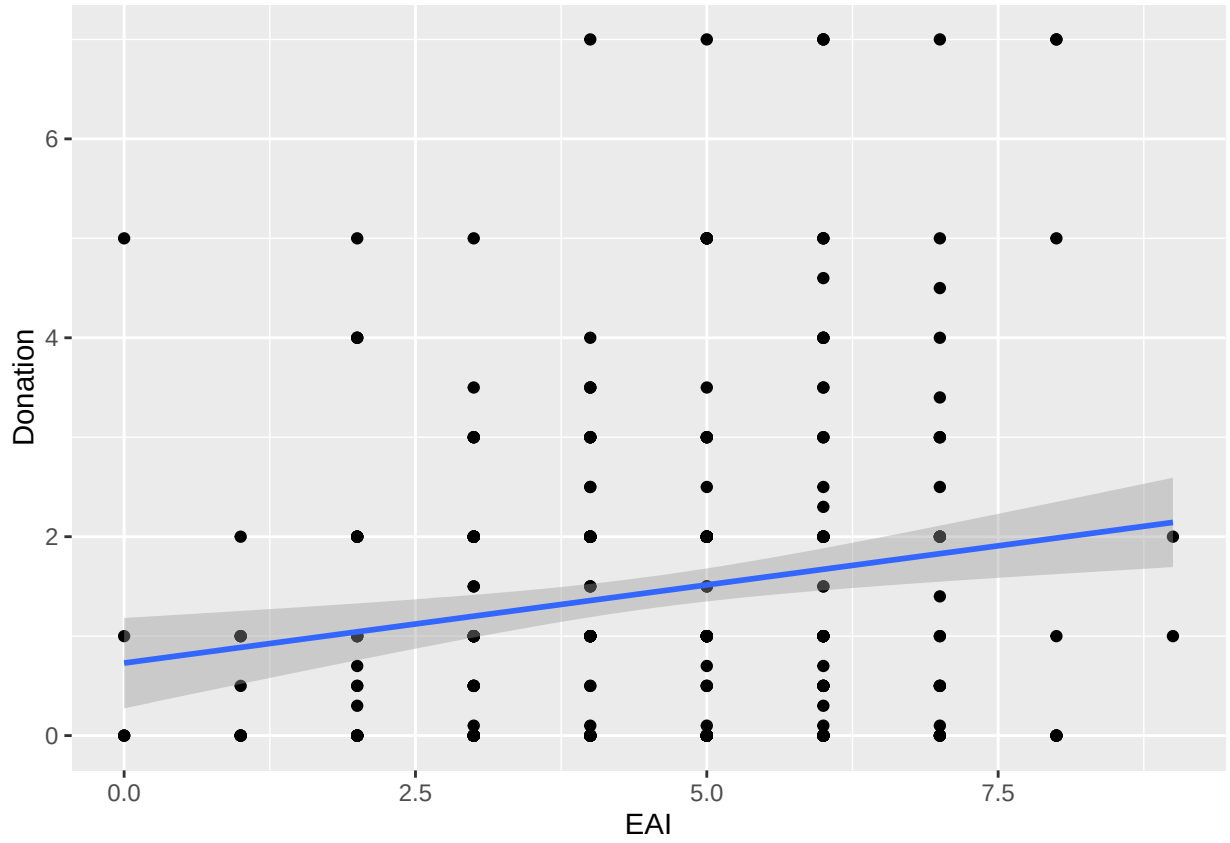
Donations by Reactance score per treatment Shows a point plot (not jittered) with Donation amount and the respective Reactance score of each participant, for each treatment. Includes a linear regression line, including the 95% confidence region, of the Reactance score as a predictor for the Donation amount, for each treatment.



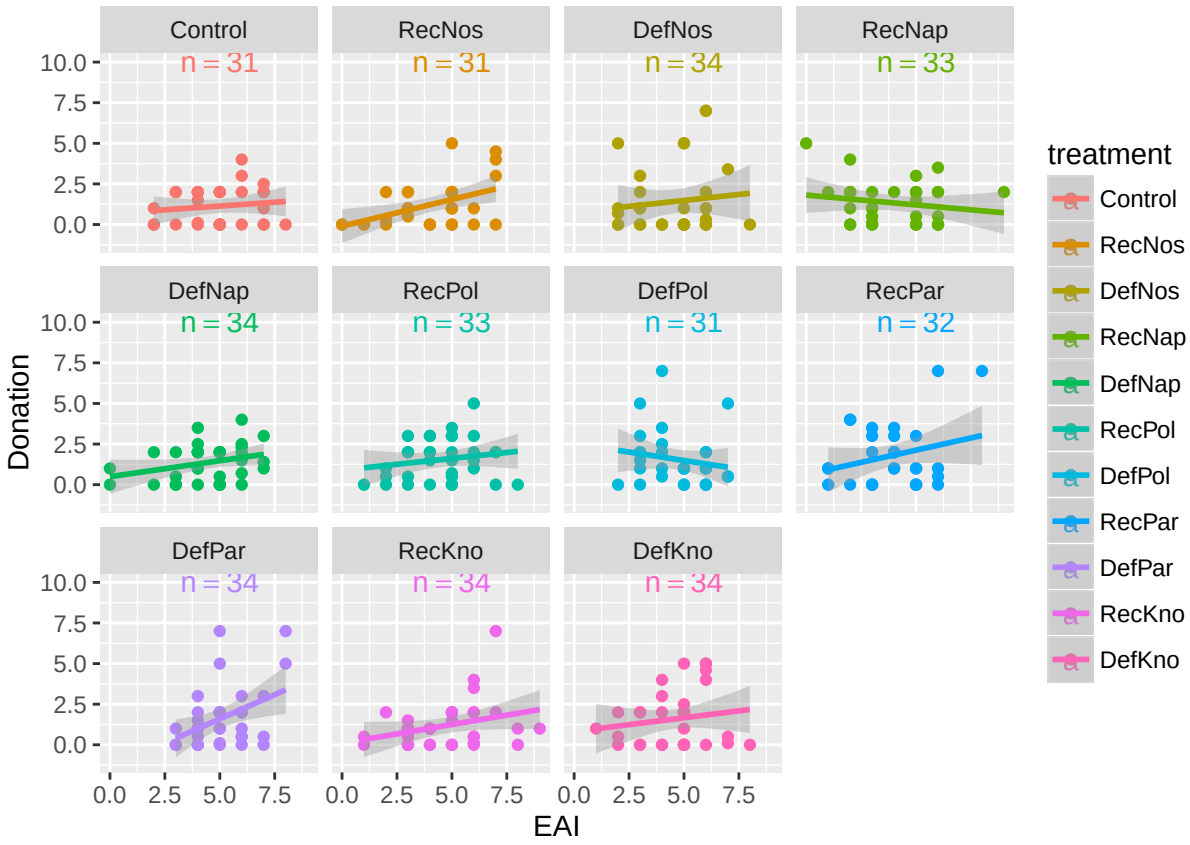
Donations by EAI score

The EAI score was constructed by changing each of the 12 EAI-items to a dummy variable equal to 1 if the subject chose 3 or 4 on the respective item, and 0 otherwise. Afterwards, all 12 dummies were added to construct an ordinal EAI score.

Shows a point plot (not jittered) with Donation amount and the respective EAI score of each participant. Includes a linear regression line, including the 95% confidence region, of the EAI score as a predictor for the Donation amount.



Donations by EAI score per treatment Shows a point plot (not jittered) with Donation amount and the respective EAI score of each participant, for each treatment. Includes a linear regression line, including the 95% confidence region, of the EAI score as a predictor for the Donation amount, for each treatment.



2. Variable: Donation dummy (1 if donated, 0 otherwise)

Aggregated descriptive statistics

```
summary(df$Donated)
```

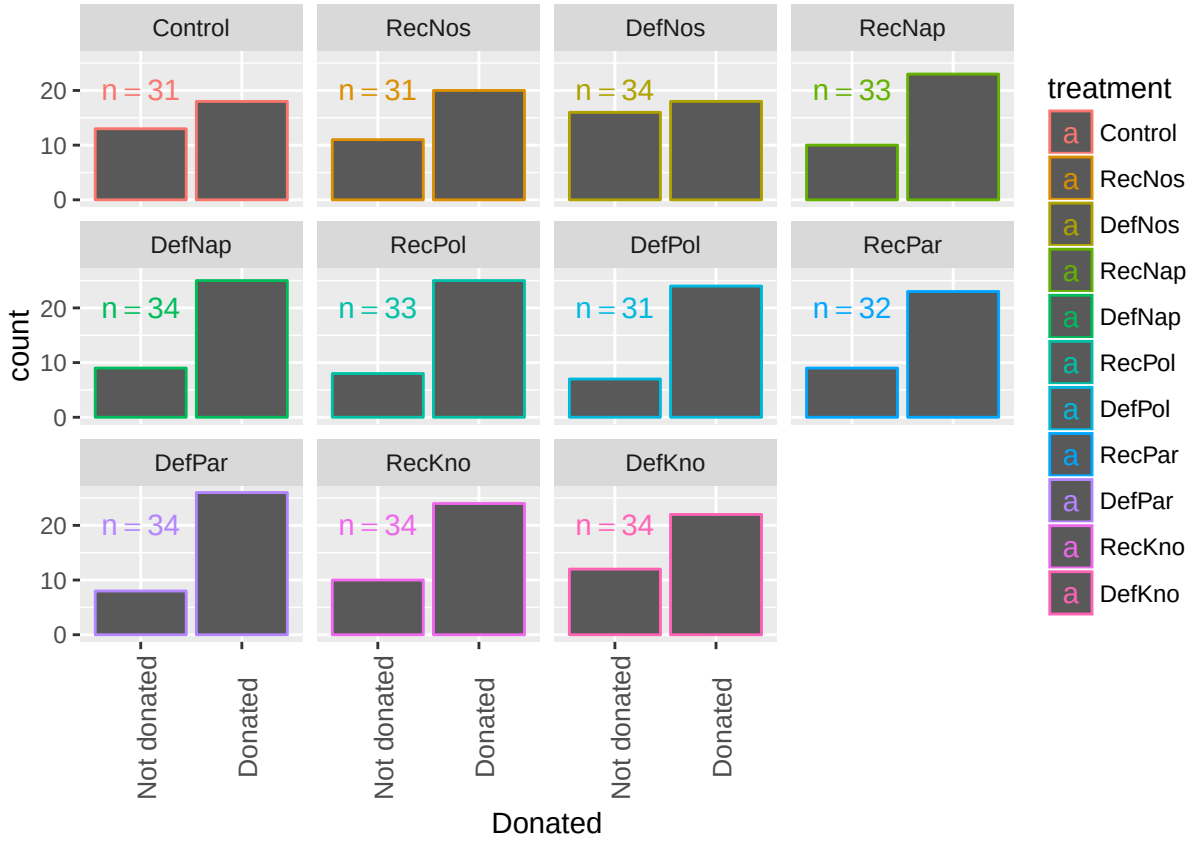
```
## Not donated     Donated
##         113         248
```

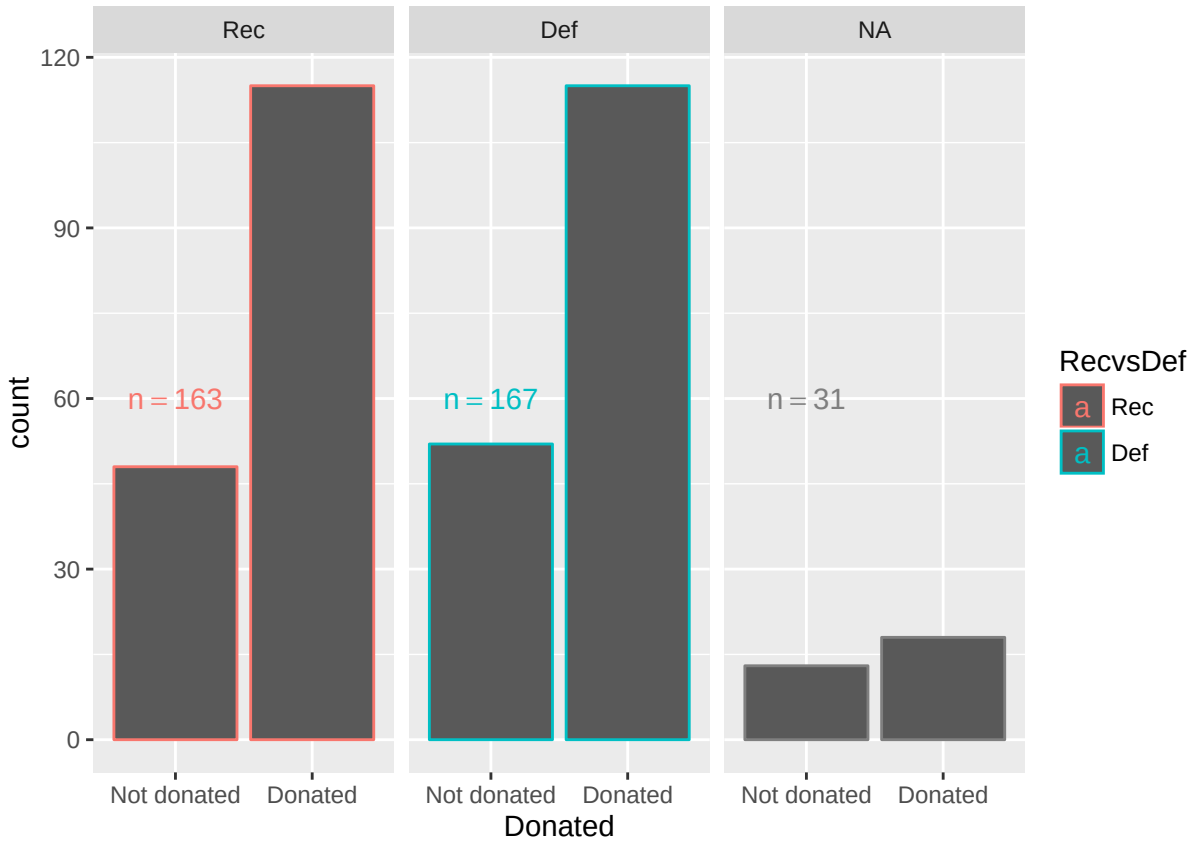
Distribution of donation dummy by treatment

```
table(df$Donated, df$treatment)
```

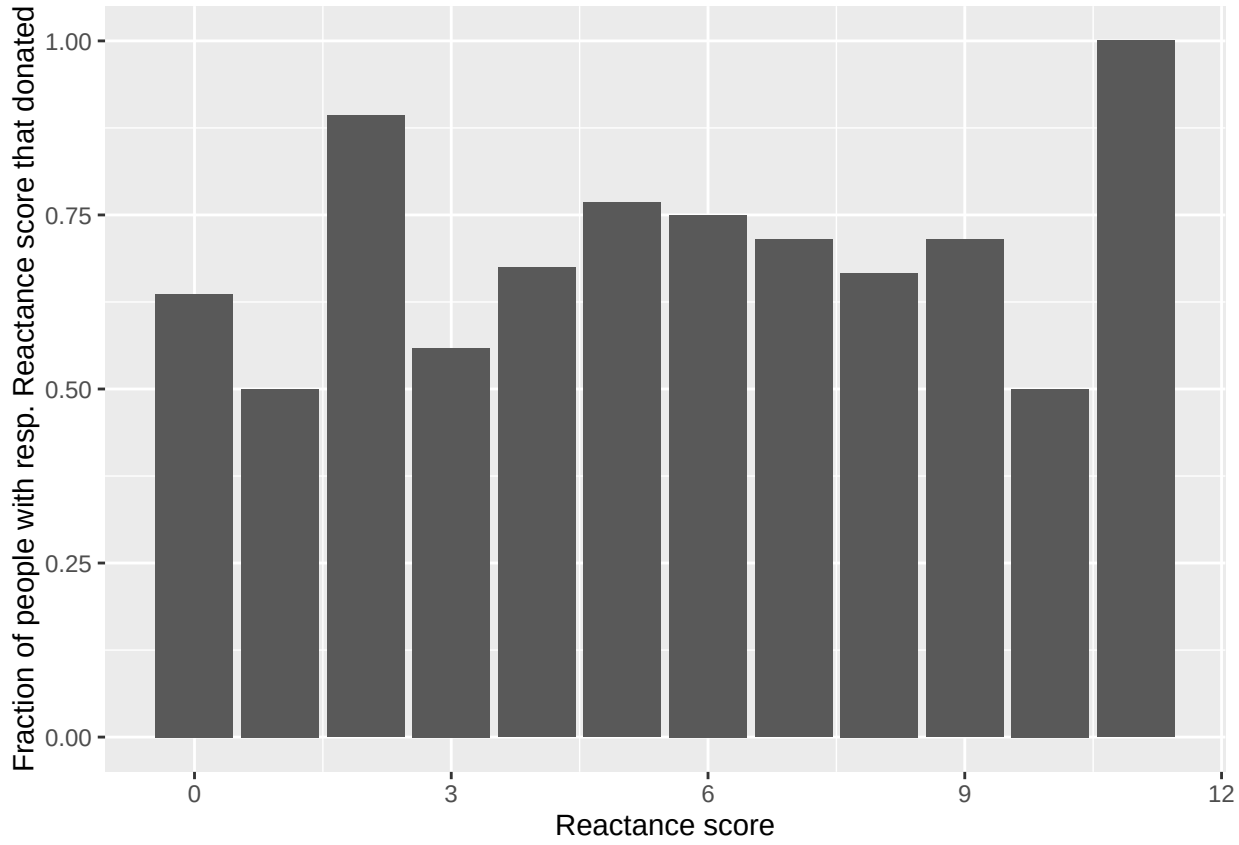
```
##
##                Control RecNos DefNos RecNap DefNap RecPol DefPol RecPar
##   Not donated       13      11      16      10       9       8       7       9
##   Donated           18      20      18      23      25      25      24      23
##
##                DefPar RecKno DefKno
##   Not donated       8      10      12
##   Donated          26      24      22
```

Decision to donate by treatment graph




Rec
Def
NA
120
90
60
30
0
count
n = 163
n = 167
n = 31
Not donated
Donated
Not donated
Donated
Not donated
Donated
Donated
RecvsDef
a
Rec
a
Def

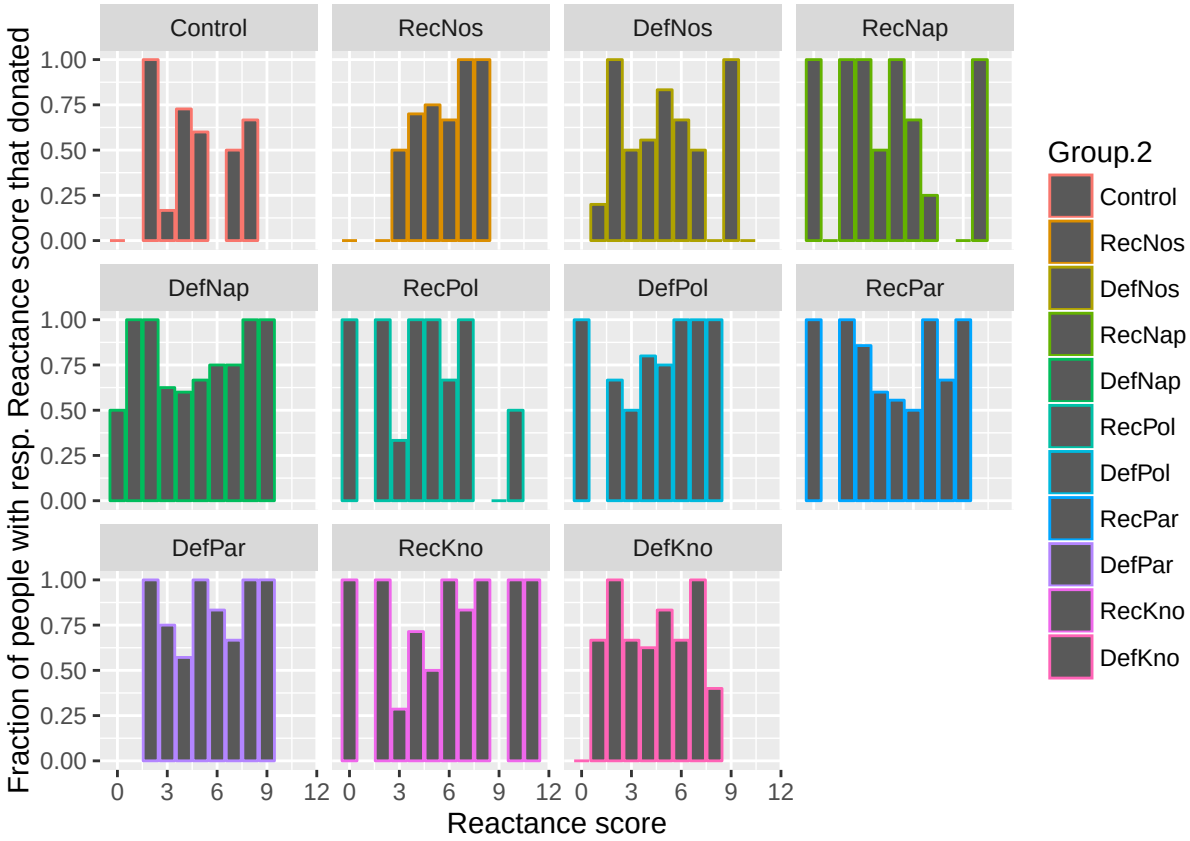
Decision to donate by Reactance score




```
chisq.test(table(df$Donated, df$Reactance))
```

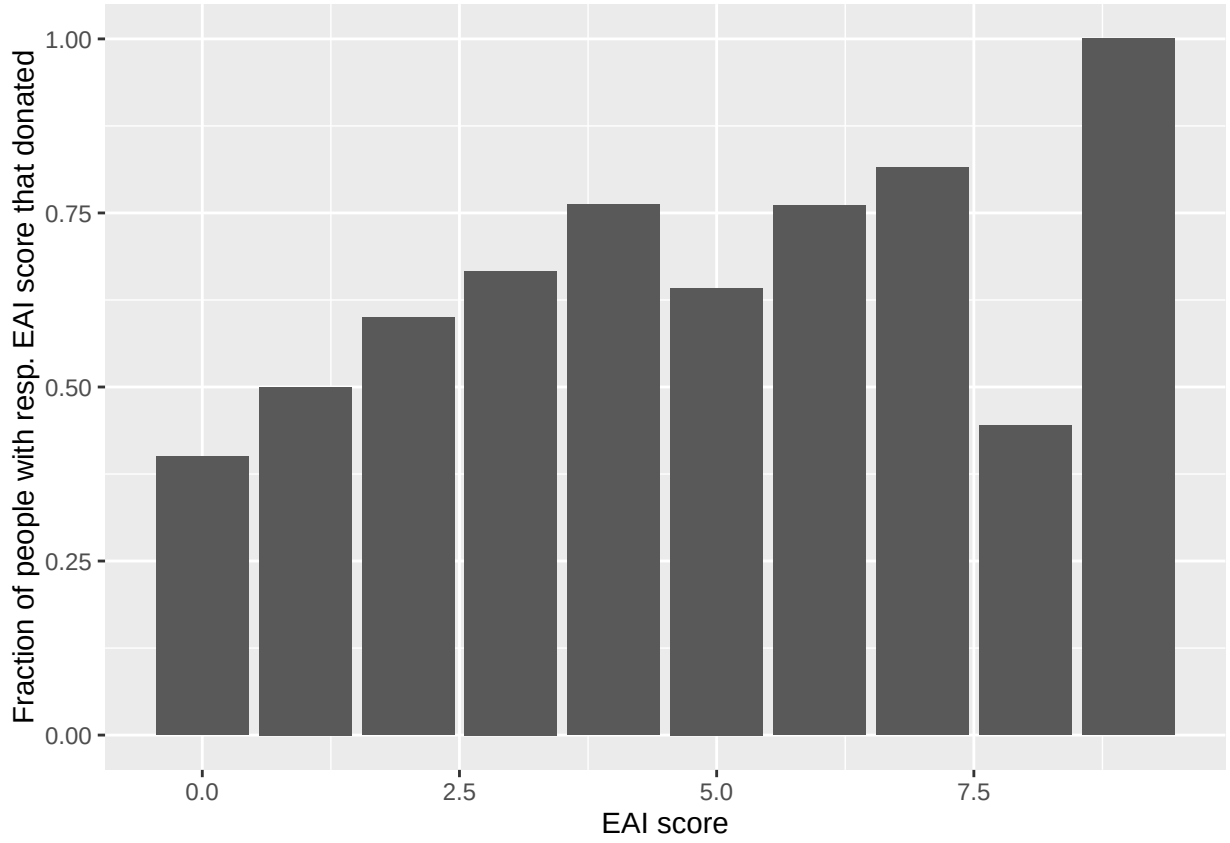
```
## Warning in chisq.test(table(df$Donated, df$Reactance)): Chi-squared
## approximation may be incorrect

##
##  Pearson's Chi-squared test
##
## data:  table(df$Donated, df$Reactance)
## X-squared = 16.887, df = 11, p-value = 0.1113
```

Decision to donate by Reactance score and treatment



At least visually there does not seem to be a relationship of Reactance score and Donation broken down by treatment.

Decision to donate by EAI score



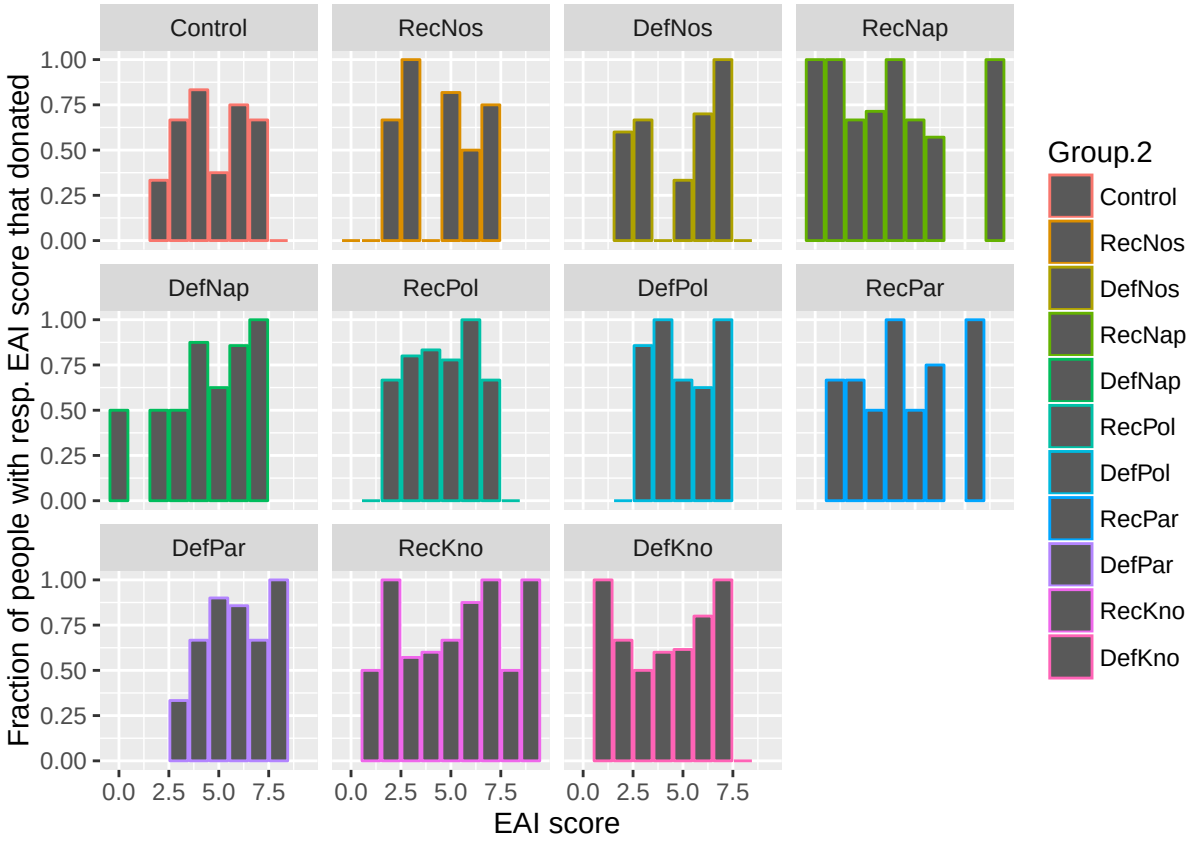

```
chisq.test(table(df$Donated, df$EAI))
```

```
## Warning in chisq.test(table(df$Donated, df$EAI)): Chi-squared approximation
## may be incorrect
```

```
##
##  Pearson's Chi-squared test
##
## data:  table(df$Donated, df$EAI)
## X-squared = 14.31, df = 9, p-value = 0.1117
```

The Chi^2-test statistic is not significant, indicating that the decision whether or not to donate anything does not depend on the EAI.

Decision to donate by EAI score and treatment



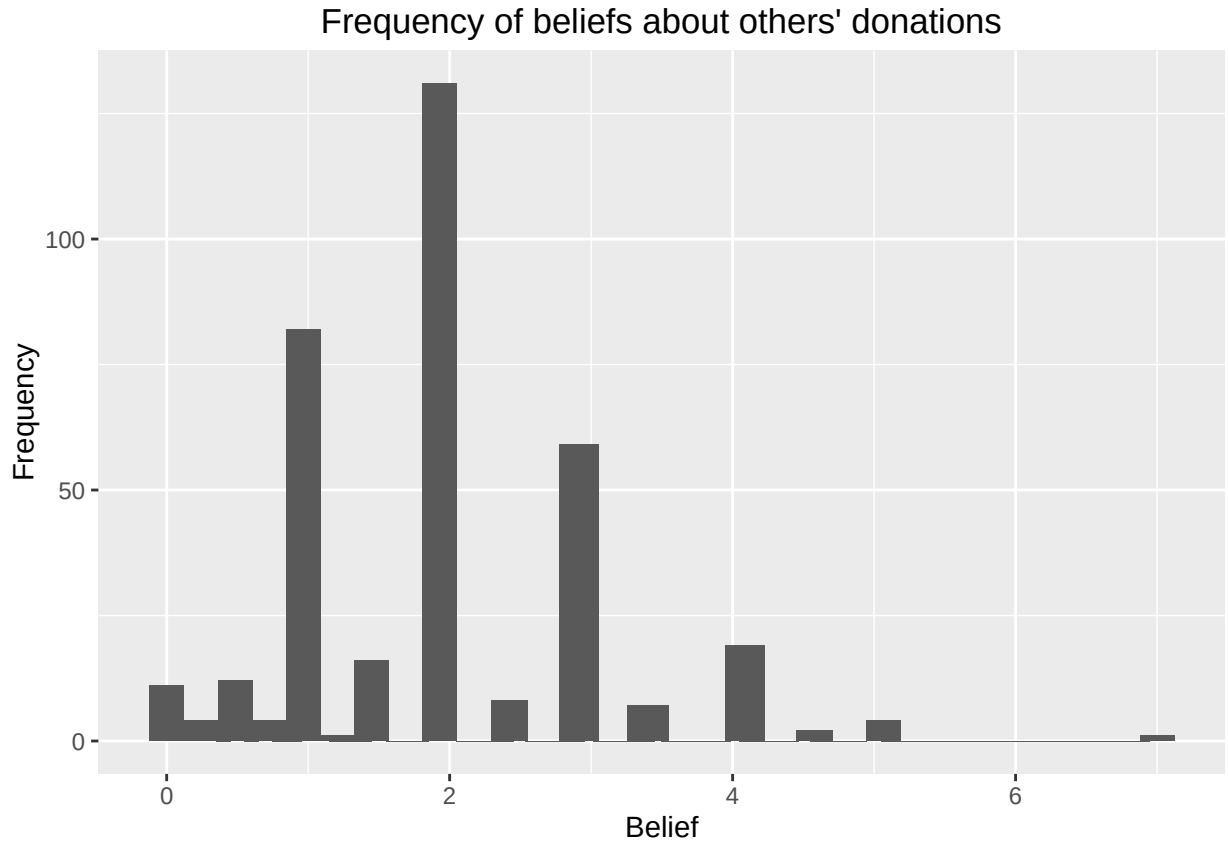
3. Variable: Beliefs about other participants donations

Aggregated descriptive statistics

```
summary(df$belief)
```

```
##    Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##   0.000   1.000   2.000   1.974   3.000   7.000
```

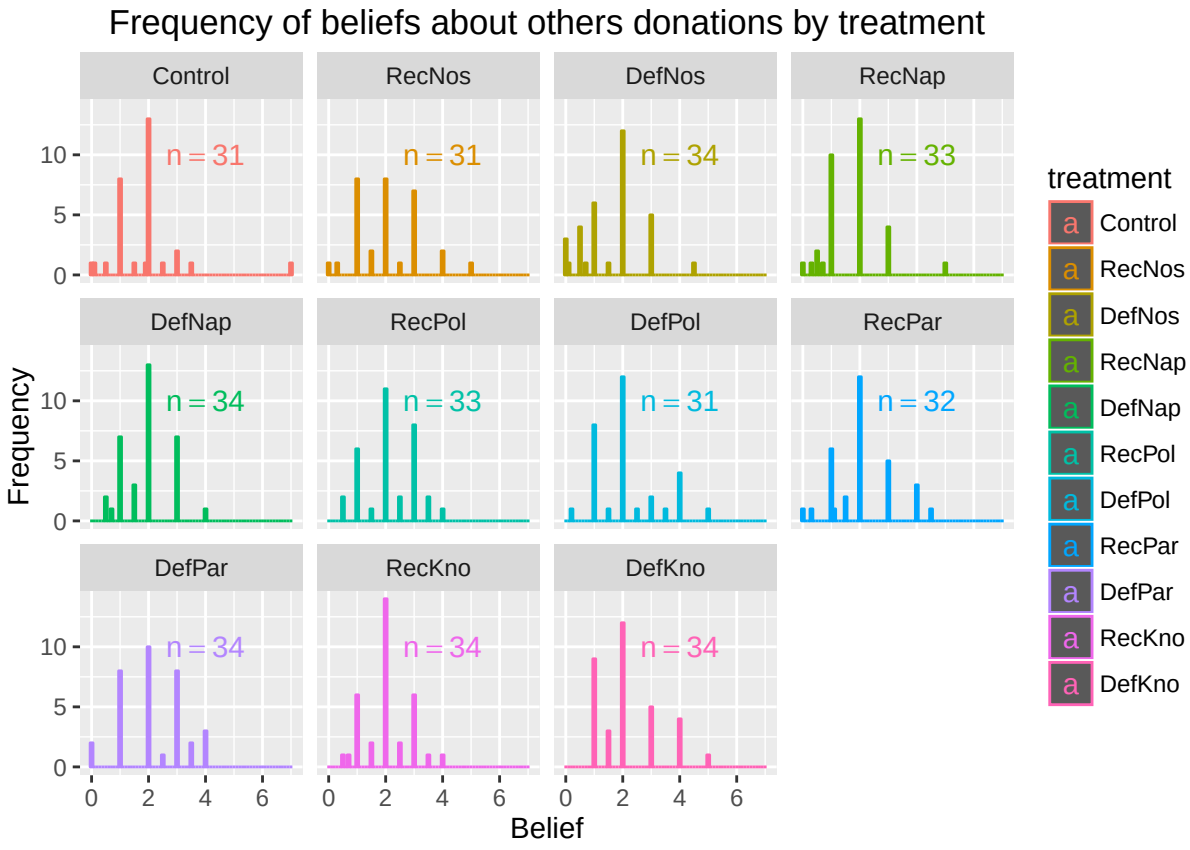
Distribution of aggregated beliefs about donations



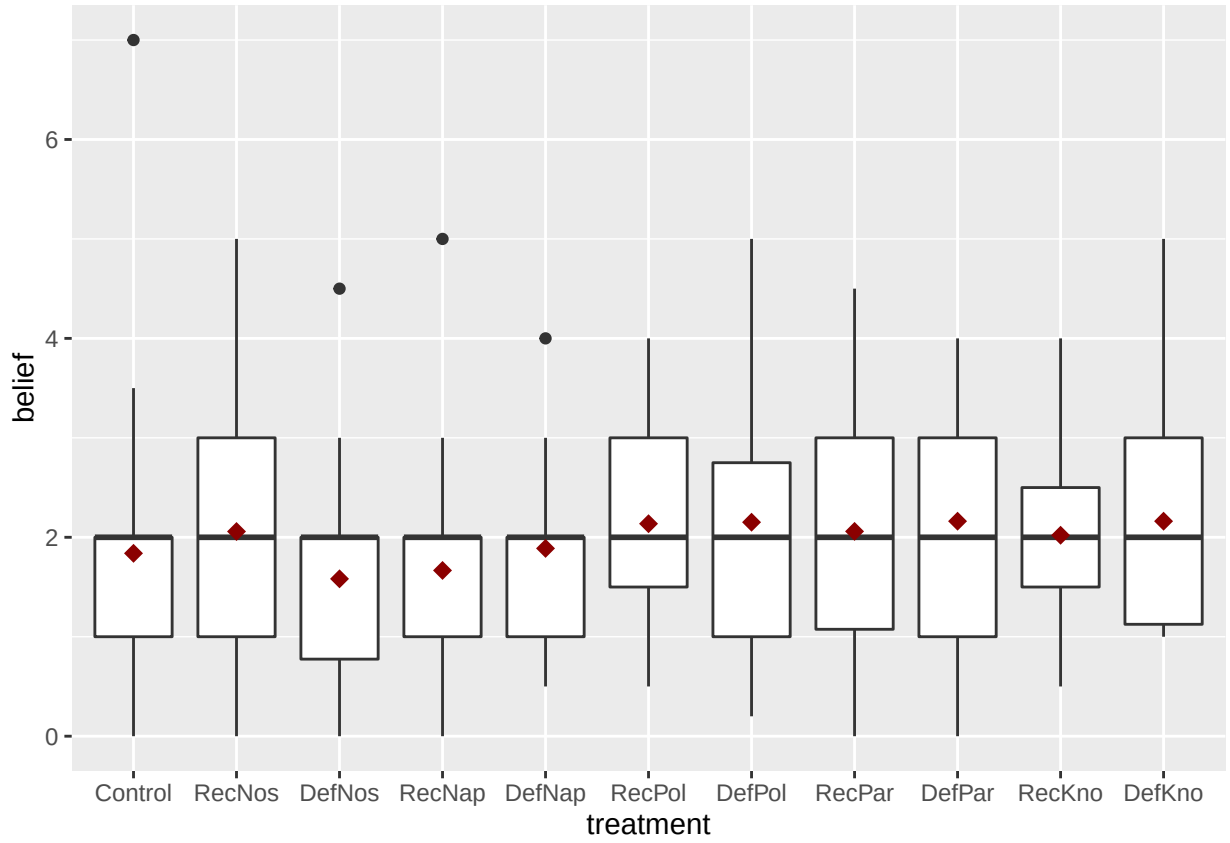
Distribution of beliefs by treatment

```
## group: Control
##   vars  n mean   sd median trimmed  mad min max range skew kurtosis   se
## 1    1 31 1.84 1.25      2    1.72 0.74   0   7     7  2.1     6.92 0.22
## ------------------------------------------------------------
## group: RecNos
##   vars  n mean   sd median trimmed  mad min max range skew kurtosis   se
## 1    1 31 2.06 1.15      2    1.98 1.48   0   5     5 0.47    -0.28 0.21
## ------------------------------------------------------------
## group: DefNos
##   vars  n mean   sd median trimmed  mad min max range skew kurtosis   se
## 1    1 34 1.58 1.07      2    1.55 1.48   0 4.5   4.5 0.43    -0.24 0.18
## ------------------------------------------------------------
## group: RecNap
##   vars  n mean   sd median trimmed  mad min max range skew kurtosis   se
## 1    1 33 1.67 1.01      2     1.6 1.48   0   5     5 0.97     1.55 0.18
## ------------------------------------------------------------
## group: DefNap
##   vars  n mean   sd median trimmed  mad min max range skew kurtosis   se
## 1    1 34 1.89 0.86      2    1.88 1.48 0.5   4   3.5 0.32    -0.63 0.15
## ------------------------------------------------------------
## group: RecPol
```

```
##   vars  n mean   sd median trimmed  mad min max range  skew kurtosis   se
## 1    1 33 2.14 0.92      2    2.13 1.48 0.5   4   3.5 -0.04    -0.98 0.16
## ------------------------------------------------------------
## group: DefPol
##   vars  n mean   sd median trimmed  mad min max range skew kurtosis   se
## 1    1 31 2.15 1.16      2    2.06 1.48 0.2   5   4.8 0.67    -0.39 0.21
## ------------------------------------------------------------
## group: RecPar
##   vars  n mean  sd median trimmed  mad min max range skew kurtosis   se
## 1    1 32 2.06 1.1      2       2 1.48   0 4.5   4.5 0.43    -0.46 0.19
## ------------------------------------------------------------
## group: DefPar
##   vars  n mean  sd median trimmed  mad min max range skew kurtosis   se
## 1    1 34 2.16 1.1      2    2.16 1.48   0   4     4 -0.1    -0.93 0.19
## ------------------------------------------------------------
## group: RecKno
##   vars  n mean   sd median trimmed  mad min max range skew kurtosis   se
## 1    1 34 2.02 0.84      2       2 0.74 0.5   4   3.5 0.22    -0.57 0.14
## ------------------------------------------------------------
## group: DefKno
##   vars  n mean   sd median trimmed  mad min max range skew kurtosis   se
## 1    1 34 2.16 1.09      2    2.05 1.48   1   5     4 0.82    -0.24 0.19
```



Beliefs by treatment (Boxplot)



Inferential Statistics

Following are relevant inferential statistics for each of three relevant dependent variables. These relevant dependent variables are 1. Donation, which is the amount the subject donated in order to retire emission rights 2. Donated, which is equal to 1 if the subject donated a positive amount, and 0 otherwise 3. Belief, which is the amount the subject thinks other participants in this experiment donated on average (not incentivized)

1. Variable: Donation to retire carbon licenses

Kruskal-Wallis-Test

The following KW-test tests the null-hypothesis that the median donations in each treatment are the same. The test assumes variance homogeneity and equal distributions of donations in each treatment. It basically tests whether the distributions from the different treatments are shifted.

```
kruskal.test(df$Donation ~ df$treatment)
```

```
##
##  Kruskal-Wallis rank sum test
##
## data:  df$Donation by df$treatment
```

```
## Kruskal-Wallis chi-squared = 6.3484, df = 10, p-value = 0.7852
```

We do not reject the null (p = .05).

ANOVA (one-way)

```
summary(aov(df$Donation ~ df$treatment))
```

```
##               Df Sum Sq Mean Sq F value Pr(>F)
## df$treatment  10   14.3   1.433   0.578  0.832
## Residuals    350  867.1   2.477
```

We do not reject the null (p = .05).

2. Variable: Donation dummy (1 if donated, 0 otherwise)

Chi² Test

The following Chi²-test tests the null-hypothesis that whether or not a participant decides to donate anything to retire emission rights (extensive margin) is independent of the treatments.

```
table(df$Donated, df$treatment)
```

```
##
##               Control RecNos DefNos RecNap DefNap RecPol DefPol RecPar
##   Not donated      13     11     16     10      9      8      7      9
##   Donated          18     20     18     23     25     25     24     23
##
##               DefPar RecKno DefKno
##   Not donated      8     10     12
##   Donated         26     24     22
```

```
chisq.test(table(df$Donated, df$treatment))
```

```
##
##  Pearson's Chi-squared test
##
## data:  table(df$Donated, df$treatment)
## X-squared = 9.4673, df = 10, p-value = 0.4884
```

We fail to reject the null (p = .05)

3. Variable: Beliefs about other participants donations

Kruskal-Wallis Test

The following KW-test tests the null-hypothesis that the median beliefs about other participants average donations in each treatment are the same. The test assumes variance homogeneity and equal distributions of donations in each treatment. It basically tests whether the distributions from the different treatments are shifted.

```r
kruskal.test(df$belief ~ df$treatment)
```

```
##
##  Kruskal-Wallis rank sum test
##
## data:  df$belief by df$treatment
## Kruskal-Wallis chi-squared = 14.092, df = 10, p-value = 0.1688
```

We do not reject the null. The beliefs about other participants donation amounts do not differ significantly between the treatments.

Test of hypotheses from the working paper

H0a

Mean and median payments to retire carbon licenses in the control condition are close to zero.

H0: Average Donations = 0 HA: Average Donations >< 0

```r
t.test(df$Donation, mu = 0)
```

```
##
##  One Sample t-test
##
## data:  df$Donation
## t = 17.487, df = 360, p-value < 2.2e-16
## alternative hypothesis: true mean is not equal to 0
## 95 percent confidence interval:
##  1.278209 1.602123
## sample estimates:
## mean of x
##  1.440166
```

```r
wilcox.test(df$Donation, mu = 0)
```

```
##
##  Wilcoxon signed rank test with continuity correction
##
## data:  df$Donation
## V = 30876, p-value < 2.2e-16
## alternative hypothesis: true location is not equal to 0
```

We reject the null that Donations are equal to 0

H0b

The share of subjects whose payments correspond to the recommended, respectively defaulted payment-value (convergence) is higher than in the control condition. Additionally, we expect that the share of subjects converging to the default is higher than the share converging to the recommendation.

Aggregated donations in recommendation treatments > donations in control group

```
describeBy(df$Donation, df$RecvsC)
```

```
## group: Control
##   vars  n mean   sd median trimmed  mad min max range skew kurtosis   se
## 1    1 31 1.13 1.15      1    1.02 1.48   0   4     4 0.42    -0.94 0.21
## ------------------------------------------------------------
## group: Rec
##   vars   n mean   sd median trimmed  mad min max range skew kurtosis   se
## 1    1 163 1.42 1.48      1     1.2 1.48   0   7     7 1.36     2.27 0.12
```

```
t.test(df$Donation ~ df$RecvsC)
```

```
##
##  Welch Two Sample t-test
##
## data:  df$Donation by df$RecvsC
## t = -1.2075, df = 50.813, p-value = 0.2328
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
##  -0.7619248  0.1896311
## sample estimates:
## mean in group Control     mean in group Rec
##              1.132258              1.418405
```

```
wilcox.test(df$Donation ~ df$RecvsC)
```

```
##
##  Wilcoxon rank sum test with continuity correction
##
## data:  df$Donation by df$RecvsC
## W = 2307.5, p-value = 0.4336
## alternative hypothesis: true location shift is not equal to 0
```

We cannot reject the null that Donations in recommendation treatments are equal to donations in control condition.

Aggregated donations in default treatments > donations in control group

```
describeBy(df$Donation, df$DefvsC)
```

```
## group: Control
##   vars  n mean   sd median trimmed  mad min max range skew kurtosis   se
## 1    1 31 1.13 1.15      1    1.02 1.48   0   4     4 0.42    -0.94 0.21
## ------------------------------------------------------------
## group: Def
##   vars   n mean   sd median trimmed  mad min max range skew kurtosis   se
## 1    1 167 1.52 1.71      1    1.21 1.48   0   7     7  1.4     1.63 0.13
```

```r
t.test(df$Donation ~ df$DefvsC)
```

```
##
##  Welch Two Sample t-test
##
## data:  df$Donation by df$DefvsC
## t = -1.5742, df = 57.756, p-value = 0.1209
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
##  -0.8775591  0.1049495
## sample estimates:
## mean in group Control     mean in group Def
##              1.132258              1.518563
```

```r
wilcox.test(df$Donation ~ df$DefvsC)
```

```
##
##  Wilcoxon rank sum test with continuity correction
##
## data:  df$Donation by df$DefvsC
## W = 2354.5, p-value = 0.4134
## alternative hypothesis: true location shift is not equal to 0
```

We cannot reject the null that Donations in default treatments are equal to donations in control condition.

Aggregated donations in default treatments > donations in recommendation treatments

```r
describeBy(df$Donation, df$RecvsDef)
```

```
## group: Rec
##   vars   n mean   sd median trimmed  mad min max range skew kurtosis   se
## 1    1 163 1.42 1.48      1     1.2 1.48   0   7     7 1.36     2.27 0.12
## ------------------------------------------------------------
## group: Def
##   vars   n mean   sd median trimmed  mad min max range skew kurtosis   se
## 1    1 167 1.52 1.71      1    1.21 1.48   0   7     7  1.4     1.63 0.13
```

```r
t.test(df$Donation ~ df$RecvsDef)
```

```
##
##  Welch Two Sample t-test
##
## data:  df$Donation by df$RecvsDef
## t = -0.57023, df = 323.38, p-value = 0.5689
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
##  -0.4457065  0.2453905
## sample estimates:
## mean in group Rec mean in group Def
##          1.418405          1.518563
```

```
wilcox.test(df$Donation ~ df$RecvsDef)
```

```
##
##  Wilcoxon rank sum test with continuity correction
##
## data:  df$Donation by df$RecvsDef
## W = 13584, p-value = 0.9755
## alternative hypothesis: true location shift is not equal to 0
```

We cannot reject the null that Donations in default treatments are equal to donations in recommendation treatments.

H0c

The share of subjects converging to the recommended, respectively defaulted payment-values in the name and picture condition is higher than in the neutral source-condition.

For Recommendations: Donations in Name and Picture treatments > Donations in No-Source treatments

```
describeBy(df$Donation, df$RecNapvsRecNos)
```

```
## group: RecNap
##   vars  n mean   sd median trimmed  mad min max range skew kurtosis   se
## 1    1 33 1.32 1.31      1    1.15 1.48   0   5     5 0.83     0.13 0.23
## ------------------------------------------------------------
## group: RecNos
##   vars  n mean   sd median trimmed  mad min max range skew kurtosis   se
## 1    1 31 1.24 1.39      1    0.99 1.48   0   5     5 1.14     0.52 0.25
```

```
t.test(df$Donation ~ df$RecNapvsRecNos)
```

```
##
##  Welch Two Sample t-test
##
## data:  df$Donation by df$RecNapvsRecNos
## t = 0.25345, df = 61.007, p-value = 0.8008
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
##  -0.5906449  0.7621014
## sample estimates:
## mean in group RecNap mean in group RecNos
##             1.321212             1.235484
```

```
wilcox.test(df$Donation ~ df$RecNapvsRecNos)
```

```
## Warning in wilcox.test.default(x = c(2, 0.5, 0, 2, 1, 2, 3.5, 2, 3, 0,
## 0.5, : cannot compute exact p-value with ties
```

```
##
##  Wilcoxon rank sum test with continuity correction
##
## data:  df$Donation by df$RecNapvsRecNos
## W = 546, p-value = 0.6373
## alternative hypothesis: true location shift is not equal to 0
```

We cannot reject the null that Donations in recommendation treatments informing about the name and picture of the source are equal to donations in recommendation treatments providing no information about the source of the recommendation.

For Defaults: Donations in Name and Picture treatments > Donations in No-Source treatments

```
describeBy(df$Donation, df$DefNapvsDefNos)
```

```
## group: DefNap
##   vars  n mean   sd median trimmed  mad min max range skew kurtosis   se
## 1    1 34 1.36 1.11   1.45    1.28 1.19   0   4     4  0.3    -0.81 0.19
## ------------------------------------------------------------
## group: DefNos
##   vars  n mean   sd median trimmed  mad min max range skew kurtosis   se
## 1    1 34 1.42 2.08    0.5    1.05 0.74   0   7     7 1.46     0.93 0.36
```

```
t.test(df$Donation ~ df$DefNapvsDefNos)
```

```
##
##  Welch Two Sample t-test
##
## data:  df$Donation by df$DefNapvsDefNos
## t = -0.14519, df = 50.431, p-value = 0.8851
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
##  -0.872389  0.754742
## sample estimates:
## mean in group DefNap mean in group DefNos
##             1.364706             1.423529
```

```
wilcox.test(df$Donation ~ df$DefNapvsDefNos)
```

```
## Warning in wilcox.test.default(x = c(2, 1, 0.7, 2, 3.5, 1, 0.5, 2, 0, 3, :
## cannot compute exact p-value with ties
```

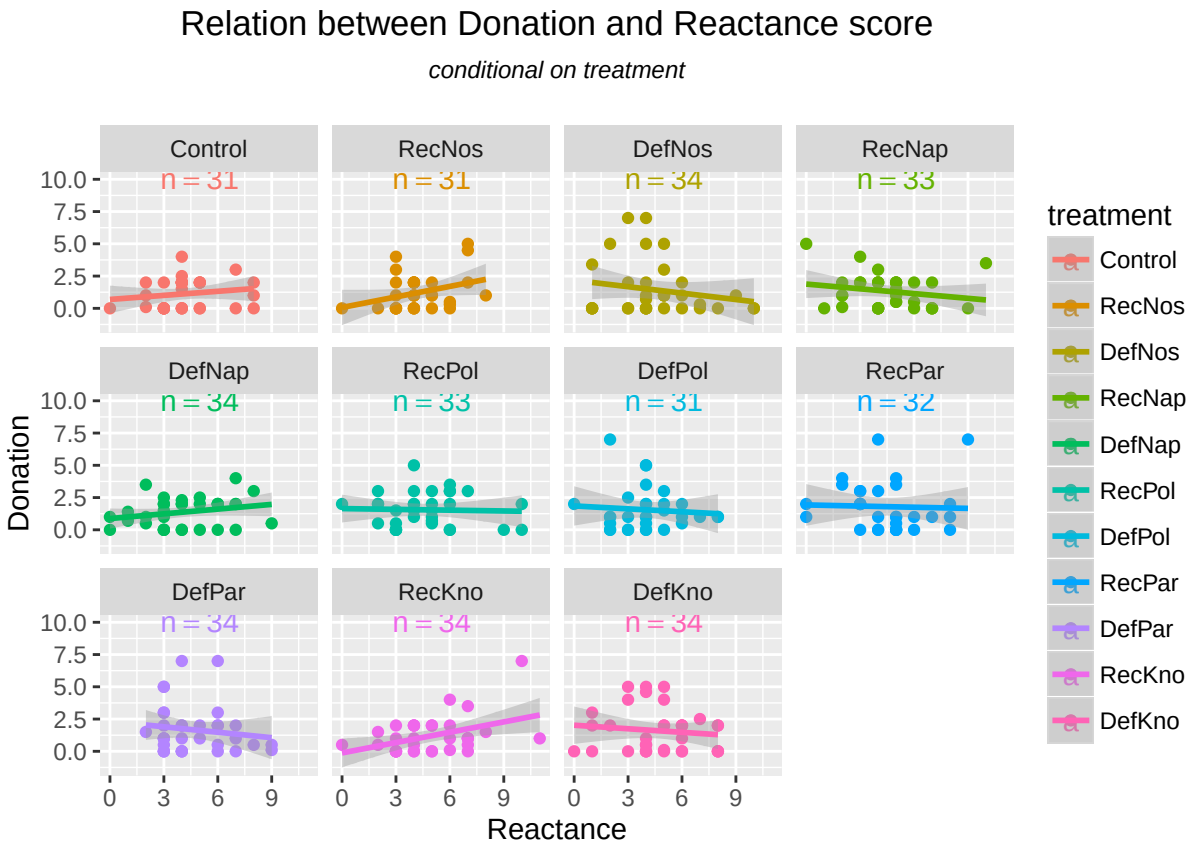
```
##
##  Wilcoxon rank sum test with continuity correction
##
## data:  df$Donation by df$DefNapvsDefNos
## W = 677, p-value = 0.2127
## alternative hypothesis: true location shift is not equal to 0
```

We cannot reject the null that Donations in default treatments informing about the name and picture of the source are equal to donations in default treatments providing no information about the source of the default.

H1

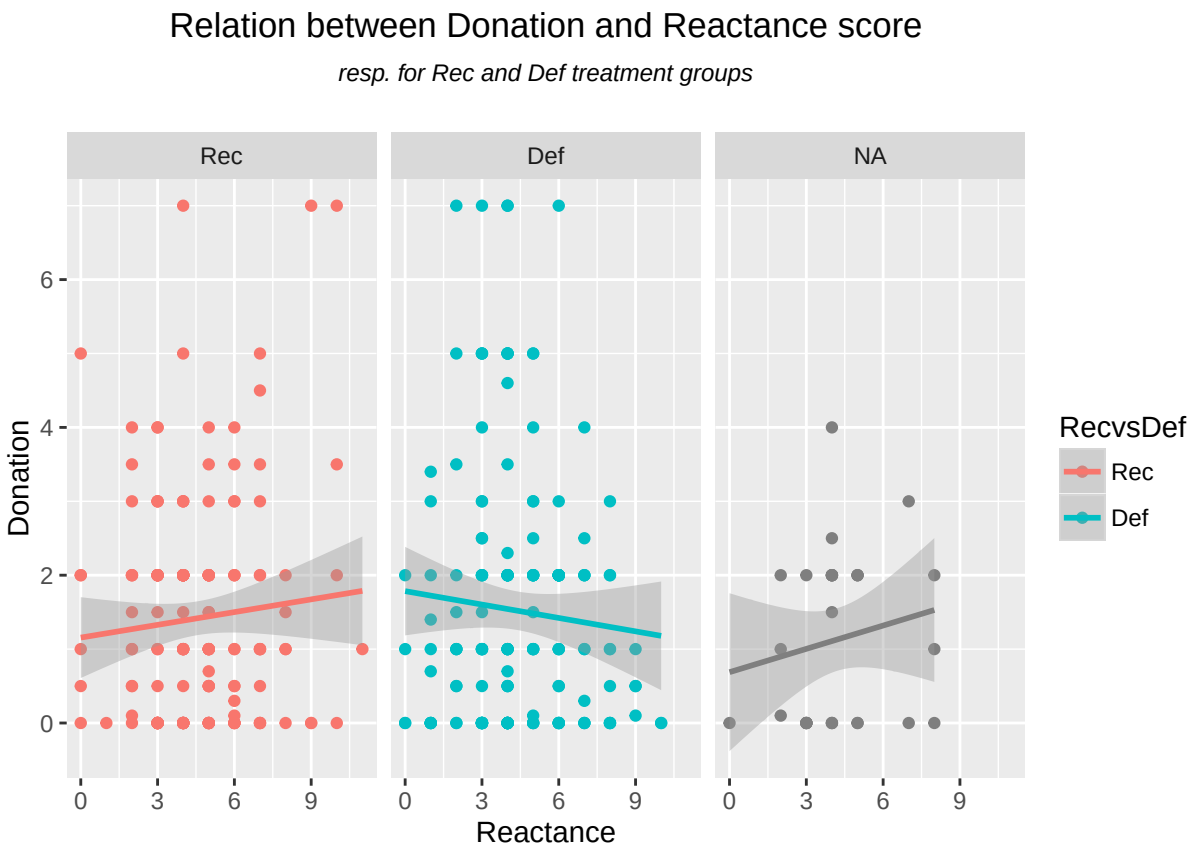
A subject's reaction towards the respective intervention ~~depends on~~ is predicted by trait reactance.

The following are not rigurous tests of the respective hypotheses, but rather approaches to get an idea about relationships and predictions.



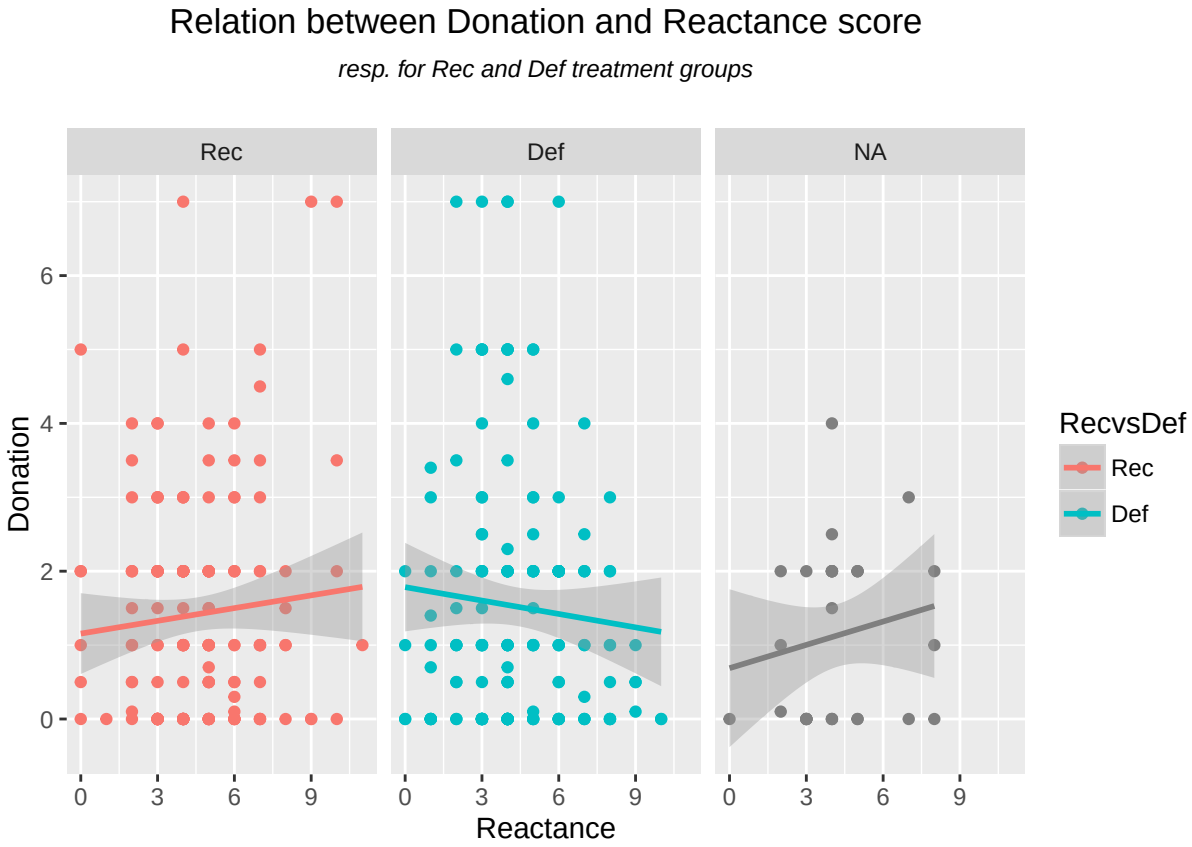
H1a

A subject that scores high on trait reactance is less likely to converge to the recommended and defaulted payment-values, than a subject scoring low on trait reactance. *The following treats the Reactance score as metric.*



H1b

A subject that scores high on trait reactance is less likely to converge to the defaulted than to the recommended payment-value.



Left is recommendation group, middle is default group, right is Control.

H2

The share of subjects converging to the recommended, respectively defaulted payment-values in the condition informing about the academic degree of the source is higher than in the name and picture condition.

For Recommendations: Donations in Knowledge treatments > Donations in Name and Picture treatments

```
describeBy(df$Donation, df$RecNapvsRecKno)
```

```
## group: RecNap
##   vars  n mean   sd median trimmed  mad min max range skew kurtosis   se
## 1    1 33 1.32 1.31      1    1.15 1.48   0   5     5 0.83     0.13 0.23
## ------------------------------------------------------------
## group: RecKno
##   vars  n mean   sd median trimmed  mad min max range skew kurtosis   se
## 1    1 34 1.19 1.45      1    0.93 1.48   0   7     7 2.07     5.36 0.25
```

```
t.test(df$Donation ~ df$RecNapvsRecKno)
```

```
##
```

```
##  Welch Two Sample t-test
##
## data:  df$Donation by df$RecNapvsRecKno
## t = 0.37725, df = 64.659, p-value = 0.7072
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
##  -0.5458115  0.8000005
## sample estimates:
## mean in group RecNap mean in group RecKno
##             1.321212             1.194118
```

```
wilcox.test(df$Donation ~ df$RecNapvsRecKno)
```

```
## Warning in wilcox.test.default(x = c(2, 0.5, 0, 2, 1, 2, 3.5, 2, 3, 0,
## 0.5, : cannot compute exact p-value with ties
```

```
##
##  Wilcoxon rank sum test with continuity correction
##
## data:  df$Donation by df$RecNapvsRecKno
## W = 608.5, p-value = 0.5453
## alternative hypothesis: true location shift is not equal to 0
```

For Defaults: Donations in Knowledge treatments > Donations in Name and Picture treatments

```
describeBy(df$Donation, df$DefNapvsDefKno)
```

```
## group: DefNap
##   vars  n mean   sd median trimmed  mad min max range skew kurtosis   se
## 1    1 34 1.36 1.11   1.45    1.28 1.19   0   4     4  0.3    -0.81 0.19
## ------------------------------------------------------------
## group: DefKno
##   vars  n mean  sd median trimmed  mad min max range skew kurtosis   se
## 1    1 34 1.59 1.7    1.5     1.4 2.22   0   5     5 0.73    -0.74 0.29
```

```
t.test(df$Donation ~ df$DefNapvsDefKno)
```

```
##
##  Welch Two Sample t-test
##
## data:  df$Donation by df$DefNapvsDefKno
## t = -0.65788, df = 56.889, p-value = 0.5133
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
##  -0.9277281  0.4689046
## sample estimates:
## mean in group DefNap mean in group DefKno
##             1.364706             1.594118
```

```
wilcox.test(df$Donation ~ df$DefNapvsDefKno)
```

```
## Warning in wilcox.test.default(x = c(2, 1, 0.7, 2, 3.5, 1, 0.5, 2, 0, 3, :
## cannot compute exact p-value with ties
```

```
##
##  Wilcoxon rank sum test with continuity correction
##
## data:  df$Donation by df$DefNapvsDefKno
## W = 573.5, p-value = 0.9598
## alternative hypothesis: true location shift is not equal to 0
```

H3-1

The share of subjects converging to the recommended, respectively defaulted payment-values in the condition informing about the political characteristic of the source is lower than in the name and picture condition.

For Recommendations: Donations in Political treatments < Donations in Name and Picture treatments

```
describeBy(df$Donation, df$RecNapvsRecPol)
```

```
## group: RecNap
##   vars  n mean   sd median trimmed  mad min max range skew kurtosis   se
## 1    1 33 1.32 1.31      1    1.15 1.48   0   5     5 0.83     0.13 0.23
## ------------------------------------------------------------
## group: RecPol
##   vars  n mean  sd median trimmed  mad min max range skew kurtosis   se
## 1    1 33 1.55 1.3    1.5    1.47 1.48   0   5     5 0.46     -0.5 0.23
```

```
t.test(df$Donation ~ df$RecNapvsRecPol)
```

```
##
##  Welch Two Sample t-test
##
## data:  df$Donation by df$RecNapvsRecPol
## t = -0.71862, df = 63.996, p-value = 0.475
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
##  -0.8705319  0.4099258
## sample estimates:
## mean in group RecNap mean in group RecPol
##             1.321212             1.551515
```

```
wilcox.test(df$Donation ~ df$RecNapvsRecPol)
```

```
## Warning in wilcox.test.default(x = c(2, 0.5, 0, 2, 1, 2, 3.5, 2, 3, 0,
## 0.5, : cannot compute exact p-value with ties
```

```
##
##  Wilcoxon rank sum test with continuity correction
##
## data:  df$Donation by df$RecNapvsRecPol
## W = 486, p-value = 0.4462
## alternative hypothesis: true location shift is not equal to 0
```

We cannot reject the null that Donations in recommendation treatments informing about the political mandate of the source are equal to donations in recommendations treatments providing the name and picture of the source.

For Defaults: Donations in Political treatments < Donations in Name and Picture treatments

```
describeBy(df$Donation, df$DefNapvsDefPol)
```

```
## group: DefNap
##   vars  n mean   sd median trimmed  mad min max range skew kurtosis   se
## 1    1 34 1.36 1.11   1.45    1.28 1.19   0   4     4  0.3    -0.81 0.19
## ------------------------------------------------------------
## group: DefPol
##   vars  n mean   sd median trimmed  mad min max range skew kurtosis  se
## 1    1 31 1.55 1.68      1    1.24 1.48   0   7     7 1.55     2.05 0.3
```

```
t.test(df$Donation ~ df$DefNapvsDefPol)
```

```
##
##  Welch Two Sample t-test
##
## data:  df$Donation by df$DefNapvsDefPol
## t = -0.51546, df = 51.451, p-value = 0.6084
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
##  -0.8989215  0.5315591
## sample estimates:
## mean in group DefNap mean in group DefPol
##             1.364706             1.548387
```

```
wilcox.test(df$Donation ~ df$DefNapvsDefPol)
```

```
## Warning in wilcox.test.default(x = c(2, 1, 0.7, 2, 3.5, 1, 0.5, 2, 0, 3, :
## cannot compute exact p-value with ties
```

```
##
##  Wilcoxon rank sum test with continuity correction
##
## data:  df$Donation by df$DefNapvsDefPol
## W = 538, p-value = 0.8883
## alternative hypothesis: true location shift is not equal to 0
```

We cannot reject the null that donations in default treatments informing about the political mandate of the source are equal to donations in default treatments providing the name and picture of the source.

H3-2

When the source is political the share of subjects converging to the default is lower than the share of subjects converging to the recommendation.

Donations in default treatments informing about the political characteristics of the source < donations in recommendation treatments informing about the political characteristics of the source

```
describeBy(df$Donation, df$RecPolvsDefPol)
```

```
## group: RecPol
##   vars  n mean  sd median trimmed  mad min max range skew kurtosis   se
## 1    1 33 1.55 1.3    1.5    1.47 1.48   0   5     5 0.46     -0.5 0.23
## ------------------------------------------------------------
## group: DefPol
##   vars  n mean   sd median trimmed  mad min max range skew kurtosis  se
## 1    1 31 1.55 1.68      1    1.24 1.48   0   7     7 1.55     2.05 0.3
```

```
t.test(df$Donation ~ df$RecPolvsDefPol)
```

```
##
##  Welch Two Sample t-test
##
## data:  df$Donation by df$RecPolvsDefPol
## t = 0.0083167, df = 56.497, p-value = 0.9934
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
##  -0.7501750  0.7564311
## sample estimates:
## mean in group RecPol mean in group DefPol
##             1.551515             1.548387
```

```
wilcox.test(df$Donation ~ df$RecPolvsDefPol)
```

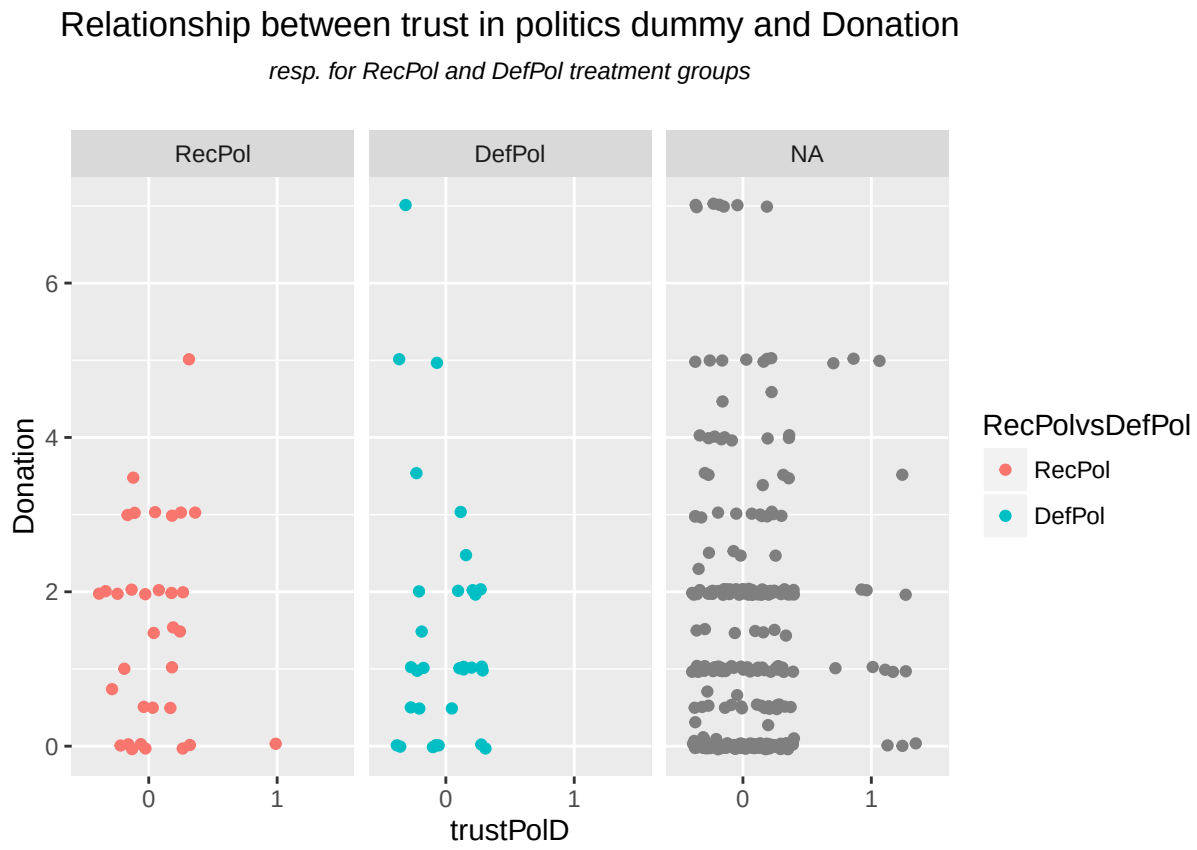
```
## Warning in wilcox.test.default(x = c(3, 1, 0.5, 3.5, 0, 0, 0.5, 0, 2, 1, :
## cannot compute exact p-value with ties
```

```
##
##  Wilcoxon rank sum test with continuity correction
##
## data:  df$Donation by df$RecPolvsDefPol
## W = 546.5, p-value = 0.6382
## alternative hypothesis: true location shift is not equal to 0
```

We cannot reject the null that donations in default treatments informing about the political characteristics of the source are equal to donations in recommendation treatments informing about the political characteristics of the source.

H3a (HERE ALSO INCLUDE PARTY TREATMENTS, NOT JUST POLITICAL?)

A subject that scores high on trust in politics is more likely to converge to the recommended and defaulted payment-values, than a subject scoring low on trust in politics. *In treatments informing about the political characteristics of the source.*

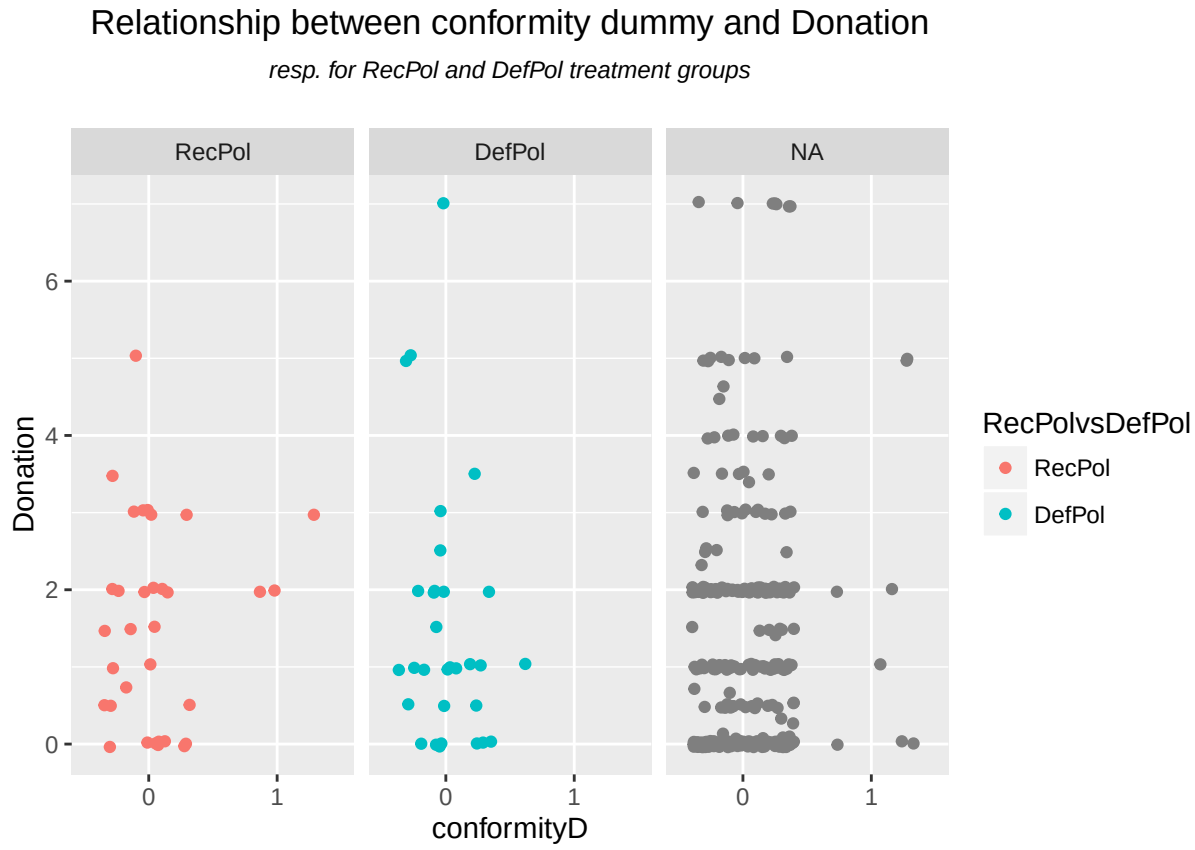



```
##
##  Wilcoxon rank sum test with continuity correction
##
## data:  df$Donation by df$trustPolD
## W = 2427.5, p-value = 0.4045
## alternative hypothesis: true location shift is not equal to 0
```

Problem is that there are not enough observations with high trust in politics (no observation in Default x Political treatment.

H3b

A subject that values conformity, i.e. doing what the majority does, is more likely to converge to the recommended and defaulted payment-values, than a subject that does not value conformity.




```
##
##  Wilcoxon rank sum test with continuity correction
##
## data:  df$Donation by df$conformityD
## W = 1723, p-value = 0.2855
## alternative hypothesis: true location shift is not equal to 0
```

Problem is that there are not enough observations with high trust in politics.

H4

The share of subjects converging to the recommended, respectively defaulted payment-values, relative to the political-characteristic condition, is higher for subjects with same party preferences, and lower for subjects with different party preferences. **Hypothesis is possibly phrased wrongly.**

```
table(df$party)
```

```
##
##                 AfD             Andere     Bündnis90/Grüne
##                  10                 21                  72
##             CDU/CSU          Die Linke                FDP
##                  58                 67                  11
## Keine (Nichtwähler)       Keine Angabe                SPD
##                  45                  7                  70
```

```r
table(df$party, df$treatment)
```

```
##
##                       Control RecNos DefNos RecNap DefNap RecPol DefPol
##   AfD                       2      1      0      2      0      0      2
##   Andere                    2      3      1      3      1      1      1
##   Bündnis90/Grüne           6      6      7      8      7      7      6
##   CDU/CSU                   5      7      4      2      5      4      5
##   Die Linke                 7      4      6      5      8      8      5
##   FDP                       0      1      2      1      1      0      0
##   Keine (Nichtwähler)       5      5      6      3      3      2      3
##   Keine Angabe              1      0      3      0      0      0      2
##   SPD                       3      4      5      9      9     11      7
##
##                       RecPar DefPar RecKno DefKno
##   AfD                      0      0      1      2
##   Andere                   2      1      3      3
##   Bündnis90/Grüne          2     11      5      7
##   CDU/CSU                  6      7     10      3
##   Die Linke                8      5      7      4
##   FDP                      0      0      3      3
##   Keine (Nichtwähler)      7      5      3      3
##   Keine Angabe             1      0      0      0
##   SPD                      6      5      2      9
```

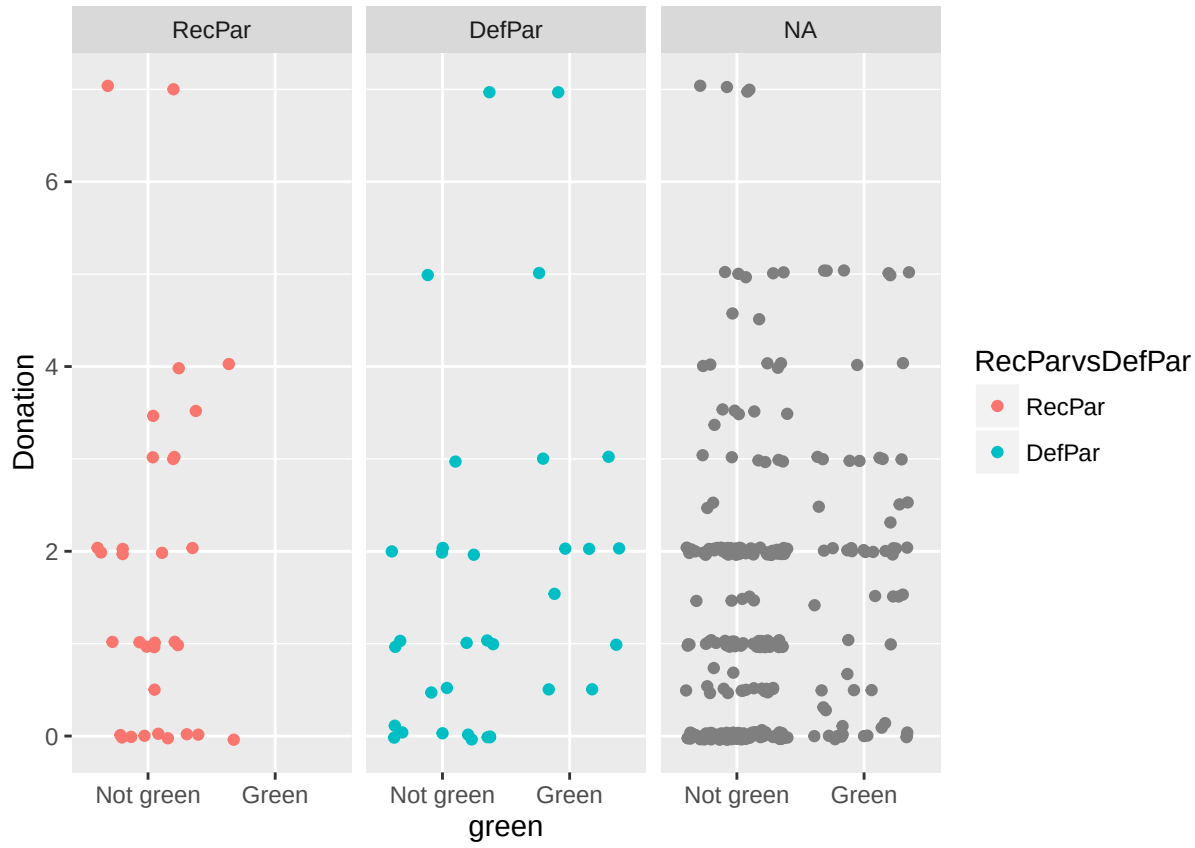
```r
chisq.test(table(df$party, df$treatment))
```

```
## Warning in chisq.test(table(df$party, df$treatment)): Chi-squared
## approximation may be incorrect
```

```
##
##  Pearson's Chi-squared test
##
## data:  table(df$party, df$treatment)
## X-squared = 83.27, df = 80, p-value = 0.3792
```

```
##
##             Control RecNos DefNos RecNap DefNap RecPol DefPol RecPar
##   Not green      25     25     27     25     27     26     25     30
##   Green           6      6      7      8      7      7      6      2
##
##             DefPar RecKno DefKno
##   Not green     23     29     27
##   Green         11      5      7
```

```
##
##             RecPar DefPar
##   Not green     30     23
##   Green          2     11
```



Further Statistics and Tests

Compare observations that believe we cooperated with Julia Verlinden vs. those who don't

Variable: Donation amount

```
## group: Ja
##   vars   n mean   sd median trimmed  mad min max range skew kurtosis  se
## 1    1 156  1.3 1.27      1    1.14 1.48   0   5     5  0.9     0.25 0.1
## ------------------------------------------------------------
## group: Nein
##   vars   n mean   sd median trimmed  mad min max range skew kurtosis   se
## 1    1 113 1.75 1.84    1.5    1.44 1.48   0   7     7 1.33     1.37 0.17
```

```
##
##  Welch Two Sample t-test
##
## data:  df$Donation by df$believe2
## t = -2.2729, df = 186.78, p-value = 0.02417
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
##  -0.85041305 -0.06011565
## sample estimates:
```

```
##   mean in group Ja mean in group Nein
##           1.298718           1.753982
```

```
##
##  Wilcoxon rank sum test with continuity correction
##
## data:  df$Donation by df$believe2
## W = 7952.5, p-value = 0.1631
## alternative hypothesis: true location shift is not equal to 0
```

*Participants who believe we cooperated with Julia Verlinden have a **lower** mean Donation, and also a **lower** variance. The difference is significant ($p < .1$) judged by the Welch Two Sample t-test, but insignificant judged by the Wilcoxon-Mann-Whitney-U test.*

Variable: Decision to donate

```
##
##                Ja Nein
##   Not donated  44   31
##   Donated     112   82
```

```
chisq.test(table(df$Donated, df$believe2))
```

```
##
##  Pearson's Chi-squared test with Yates' continuity correction
##
## data:  table(df$Donated, df$believe2)
## X-squared = 2.3598e-06, df = 1, p-value = 0.9988
```

The Chi²-Test is not significant. This implies that the decision whether or not to contribute anything vs. nothing is not dependent on the answer to the question whether the respondent believed that we really cooperated with Julia Verlinden.

Decision to donate for subjects seeing a recommendation vs. subjects seeing a default, irrespective of source

```
table(df$Donated, df$RecvsDef)
```

```
##
##               Rec Def
##   Not donated  48  52
##   Donated     115 115
```

```
chisq.test(table(df$Donated, df$RecvsDef))
```

```
##
##  Pearson's Chi-squared test with Yates' continuity correction
##
## data:  table(df$Donated, df$RecvsDef)
## X-squared = 0.04587, df = 1, p-value = 0.8304
```

The Chi²-Test is not significant. This implies that the decision whether or not to contribute anything vs. nothing is not dependent on whether the subjects encountered a recommendation or a default value with our without any specific source or information on the source.

Decision to donate for subjects seeing a recommendation vs. subjects seeing a default, with non-political source-information

```
##
##               Non-political/partisan Rec Non-political/partisan Def
##   Not donated                          31                          37
##   Donated                              67                          65
```

```
##
##  Pearson's Chi-squared test with Yates' continuity correction
##
## data:  table(df$Donated, df$RecvsDefNonPolPar)
## X-squared = 0.29534, df = 1, p-value = 0.5868
```

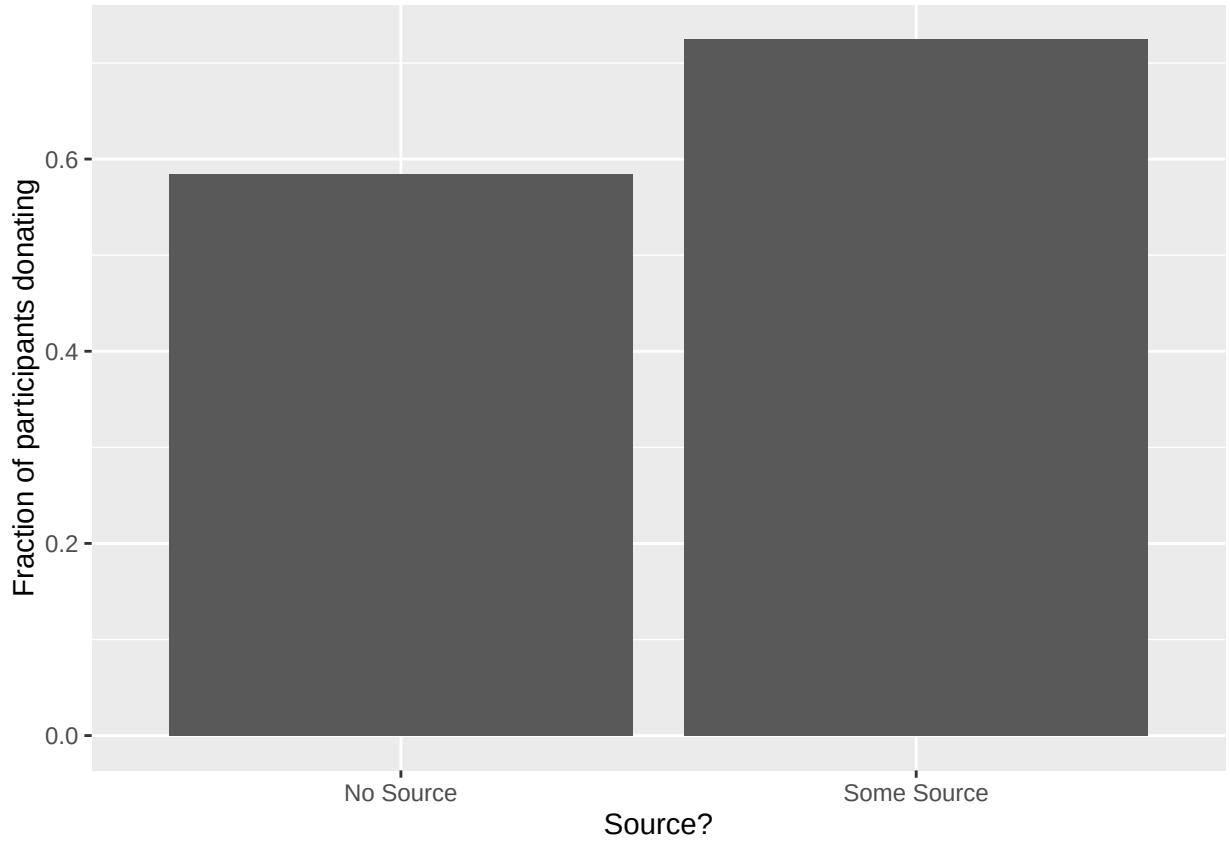
The Chi²-Test is not significant. This implies that the decision whether or not to contribute anything vs. nothing is not dependent on whether the subjects encountered a non-political or non-partisan recommendation or a respective default value.

Decision to donate for subjects seeing an intervention without source-information vs. some source-information

```
##
##               No Source Some Source
##   Not donated        27          73
##   Donated            38         192
```

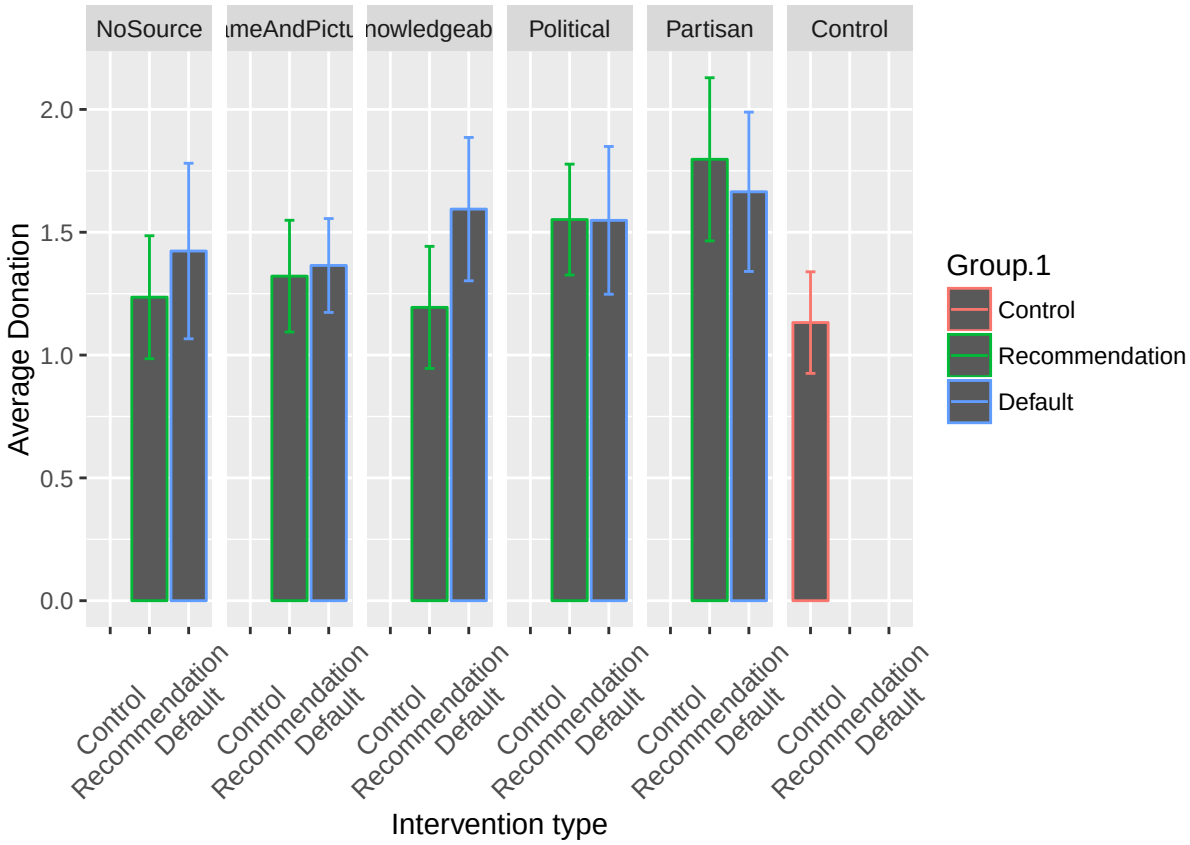
```
##
##  Pearson's Chi-squared test with Yates' continuity correction
##
## data:  table(df$Donated, df$NosvsSome)
## X-squared = 4.1982, df = 1, p-value = 0.04047
```

```
## Warning in Ops.factor(left, right): '/' not meaningful for factors
```

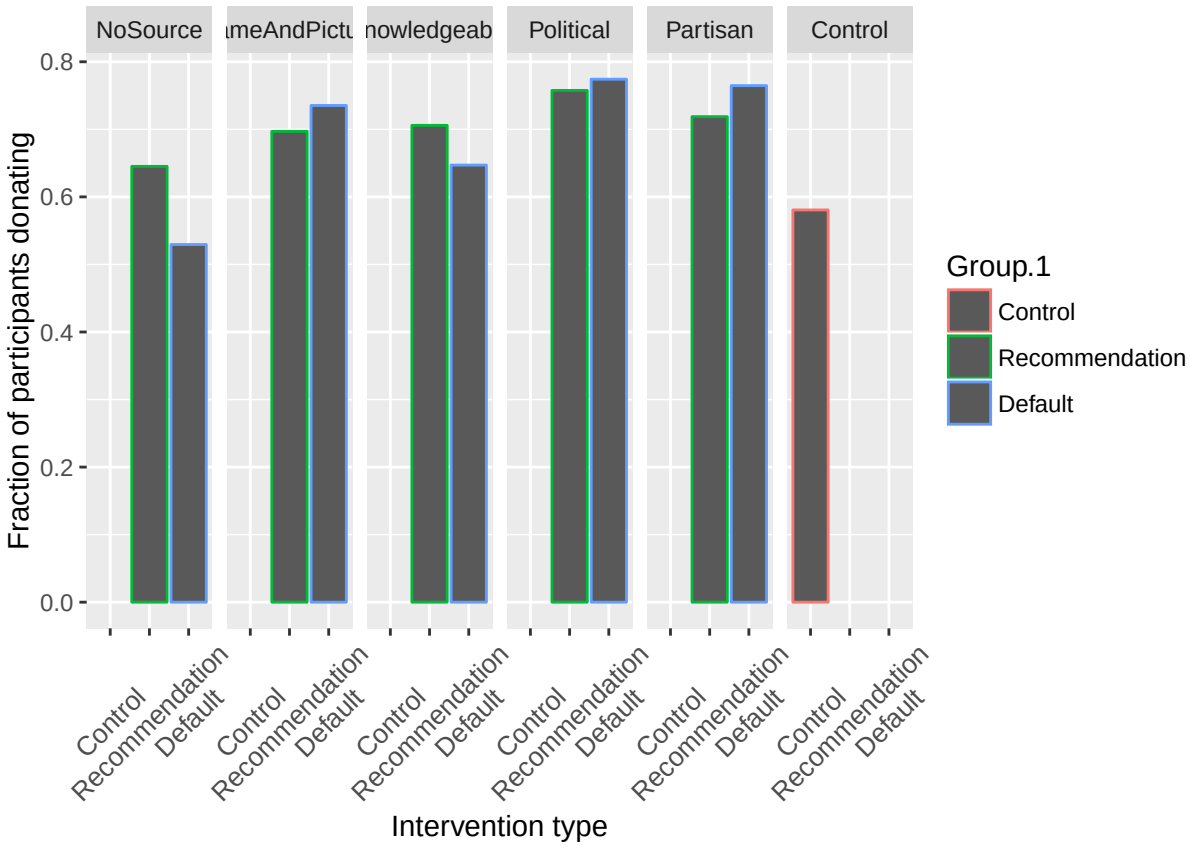


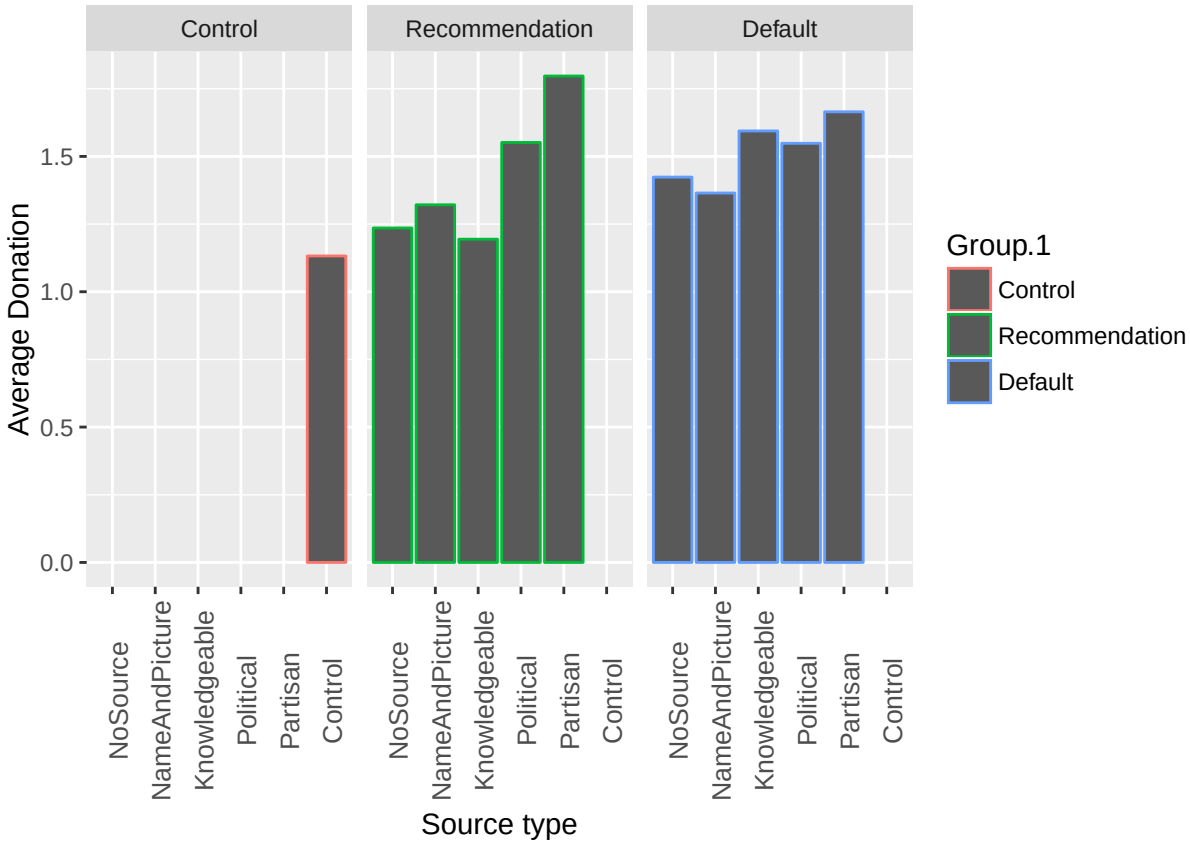
The Chi² test is significant ($p < .1$). This implies that the decision whether or not to contribute or not depends on whether or not some source-information vs. no source-information is provided.

Graphs in order to see potential interactions

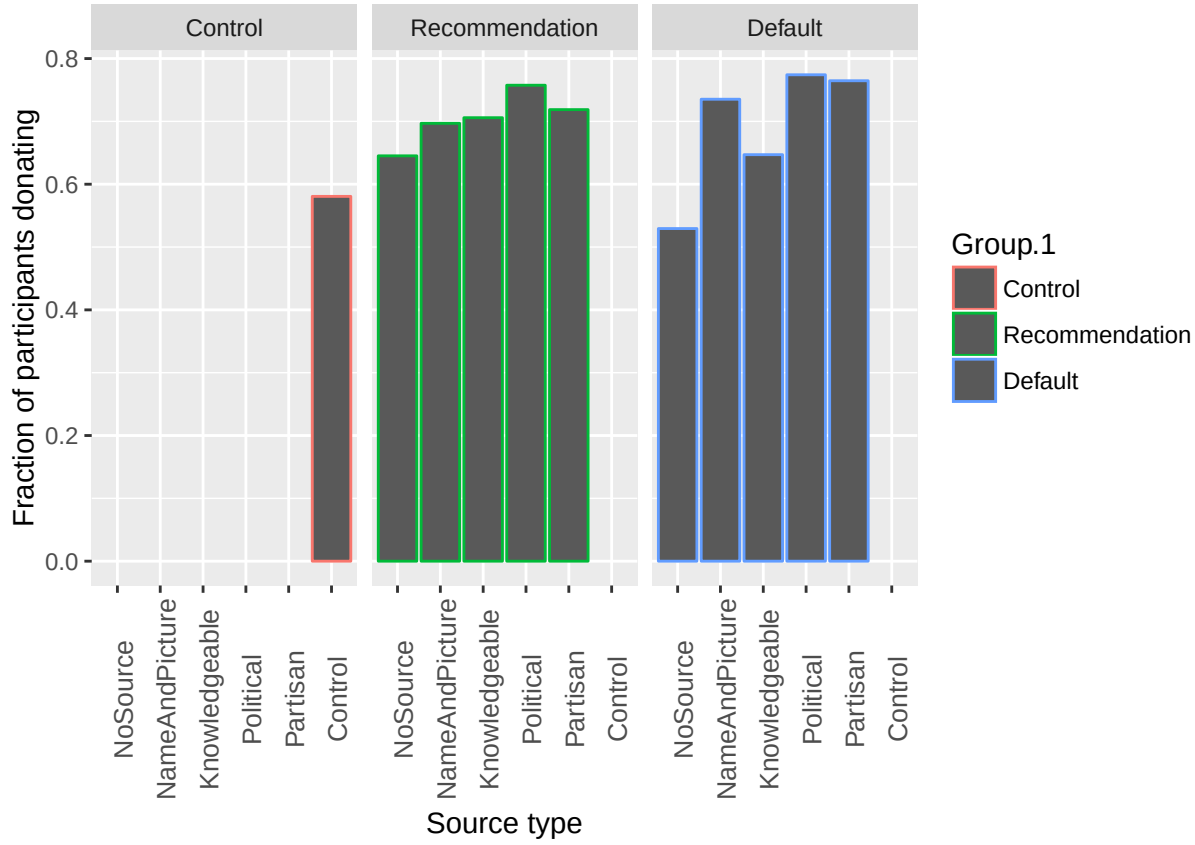



```
## Warning in Ops.factor(left, right): '/' not meaningful for factors

## Warning in Ops.factor(left, right): '/' not meaningful for factors
```

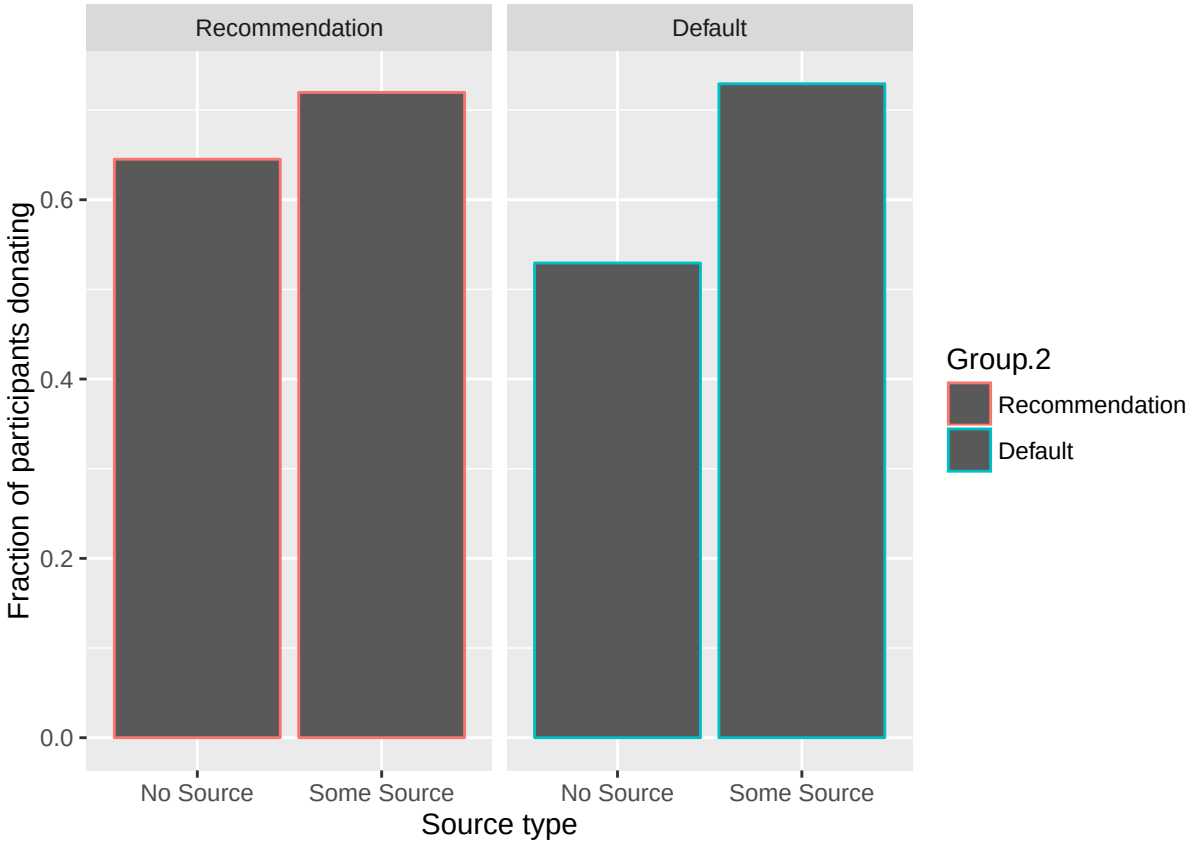

NoSource
meAndPictu
nowledgeab
Political
Partisan
Control
Fraction of participants donating
0.0
0.2
0.4
0.6
0.8
Control
Recommendation
Default
Intervention type
Group.1
Control
Recommendation
Default

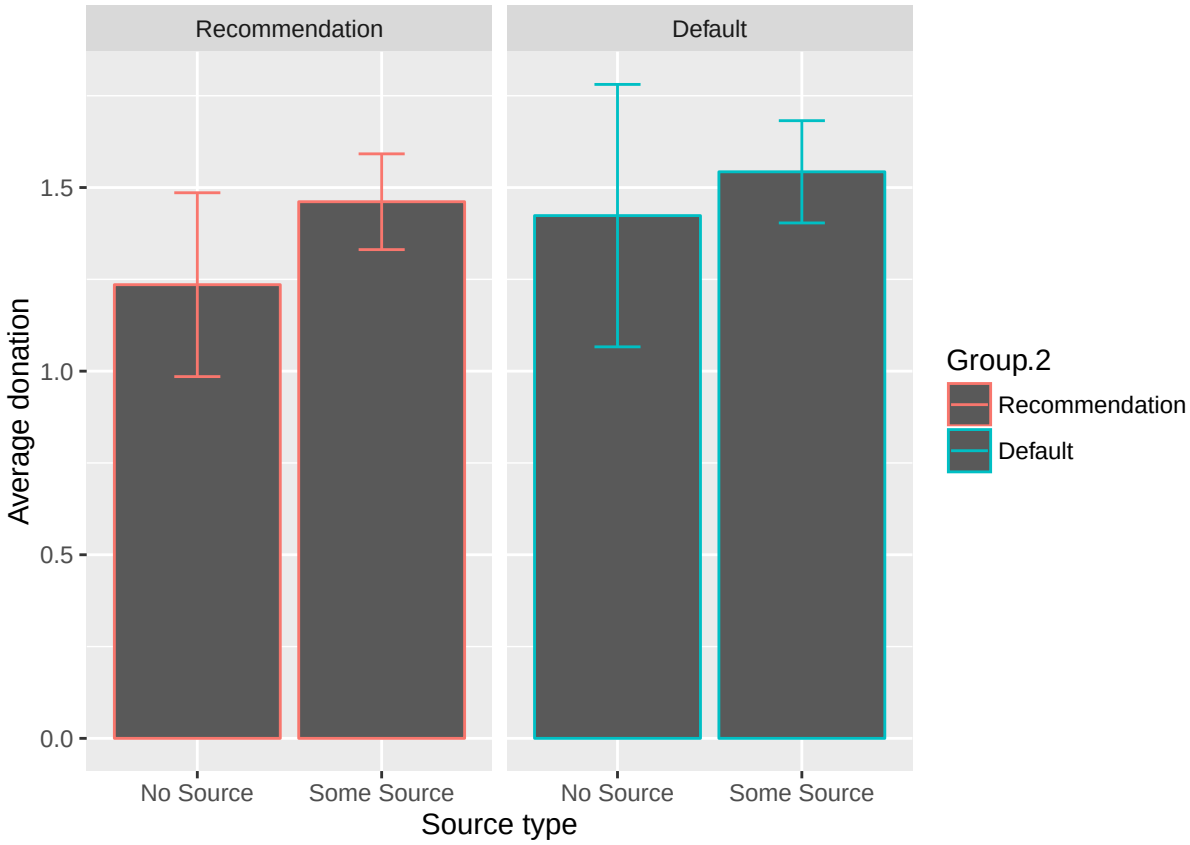

Control
Recommendation
Default
Average Donation
0.0
0.5
1.0
1.5
NoSource
NameAndPicture
Knowledgeable
Political
Partisan
Control
Source type
Group.1
Control
Recommendation
Default

```
## Warning in Ops.factor(left, right): '/' not meaningful for factors

## Warning in Ops.factor(left, right): '/' not meaningful for factors
```




```
## Warning in Ops.factor(left, right): '/' not meaningful for factors

## Warning in Ops.factor(left, right): '/' not meaningful for factors
```


Recommendation
Default
Fraction of participants donating
0.0
0.2
0.4
0.6
No Source
Some Source
No Source
Some Source
Source type
Group.2
Recommendation
Default

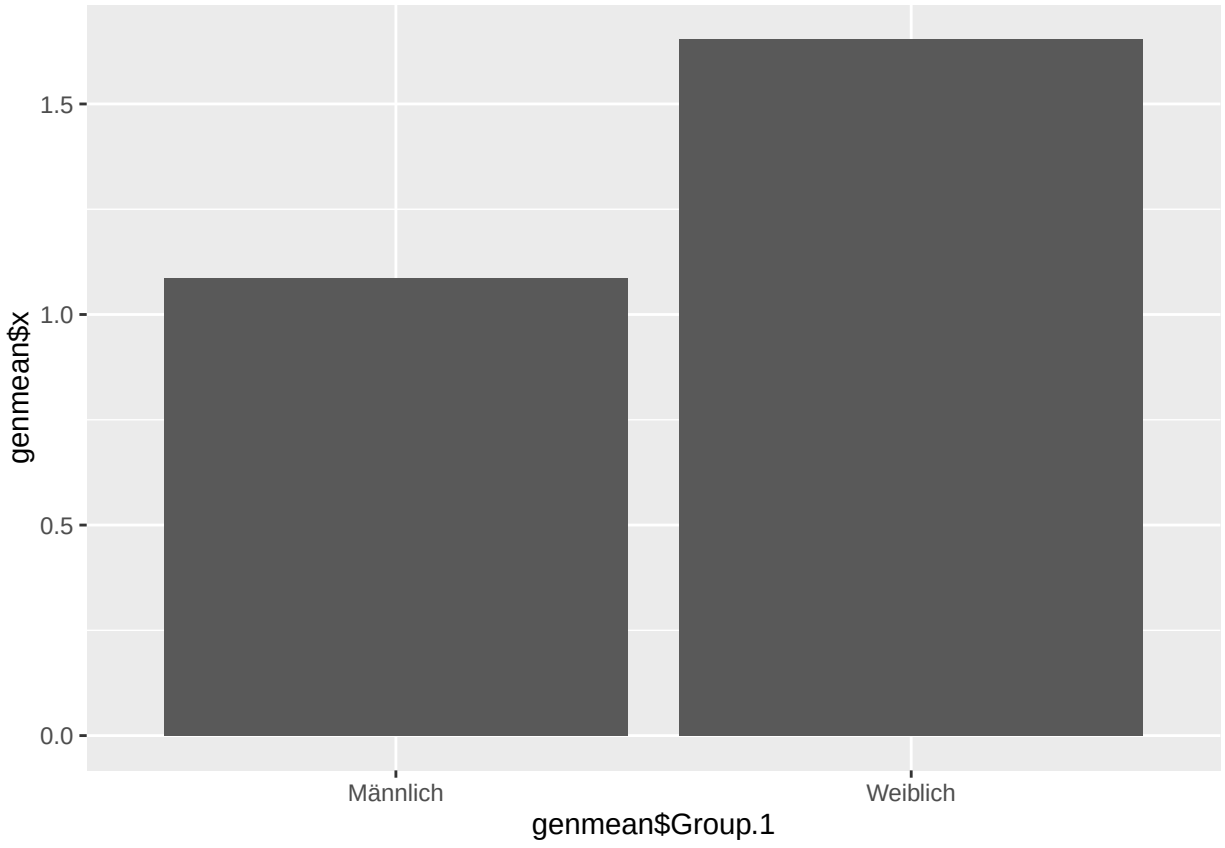

Recommendation
Default
Average donation
0.0
0.5
1.0
1.5
No Source
Some Source
No Source
Some Source
Source type
Group.2
Recommendation
Default

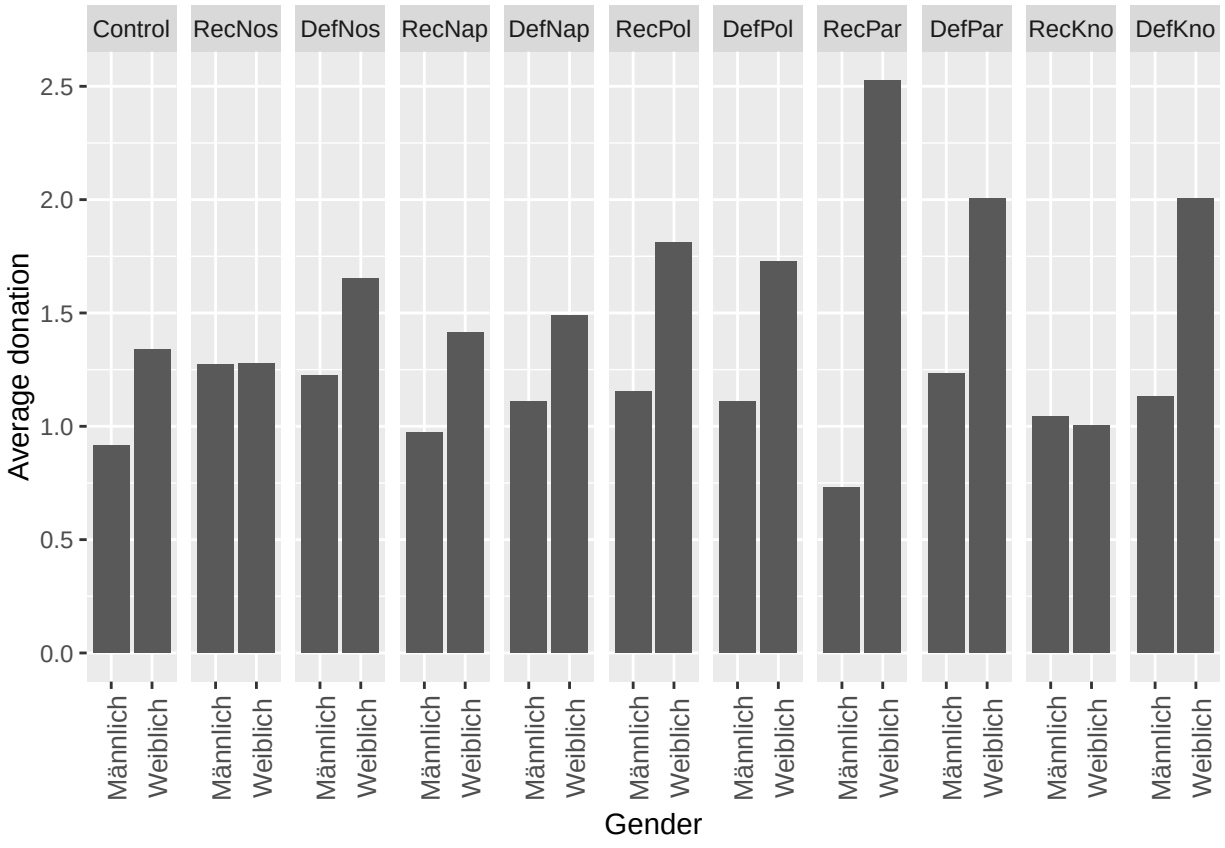
Gender differences (by treatment)

```
## group: Keine Angabe
##   vars n mean   sd median trimmed  mad min max range skew kurtosis   se
## 1    1 4    3 3.56    2.5       3 3.71   0   7     7  0.1    -2.32 1.78
## ------------------------------------------------------------
## group: Männlich
##   vars   n mean   sd median trimmed  mad min max range skew kurtosis   se
## 1    1 145 1.09 1.37    0.7    0.84 1.04   0   7     7 1.83     4.14 0.11
## ------------------------------------------------------------
## group: Weiblich
##   vars   n mean   sd median trimmed  mad min max range skew kurtosis   se
## 1    1 212 1.65 1.59    1.5    1.42 1.48   0   7     7 1.18     1.45 0.11
```

```
##
##  Welch Two Sample t-test
##
## data:  dfsub$Donation by dfsub$gender
## t = -3.594, df = 336.21, p-value = 0.0003743
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
##  -0.8785382 -0.2570311
## sample estimates:
## mean in group Männlich mean in group Weiblich
##               1.085517               1.653302
```

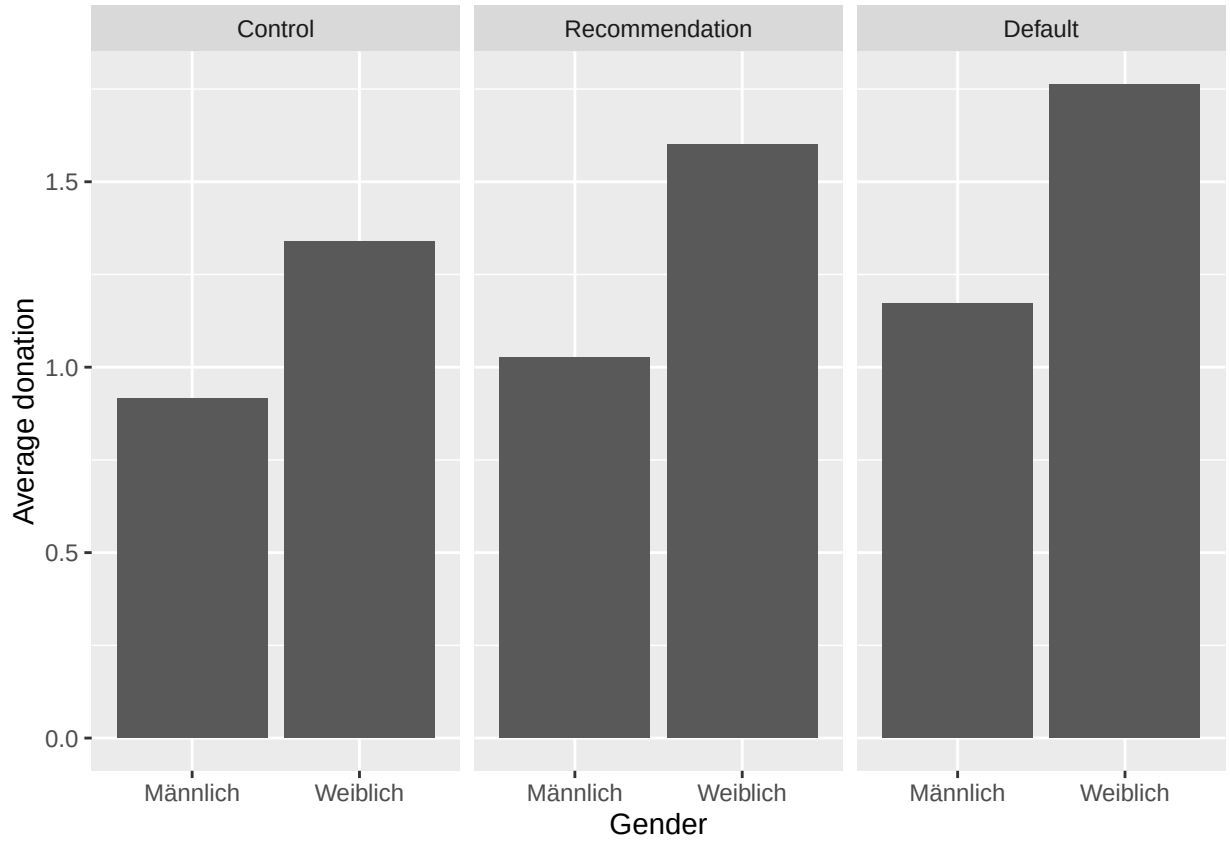
```
##
##  Wilcoxon rank sum test with continuity correction
##
## data:  dfsub$Donation by dfsub$gender
## W = 11718, p-value = 9.388e-05
## alternative hypothesis: true location shift is not equal to 0
```


1.5
1.0
0.5
0.0
genmean$x
Männlich
Weiblich
genmean$Group.1

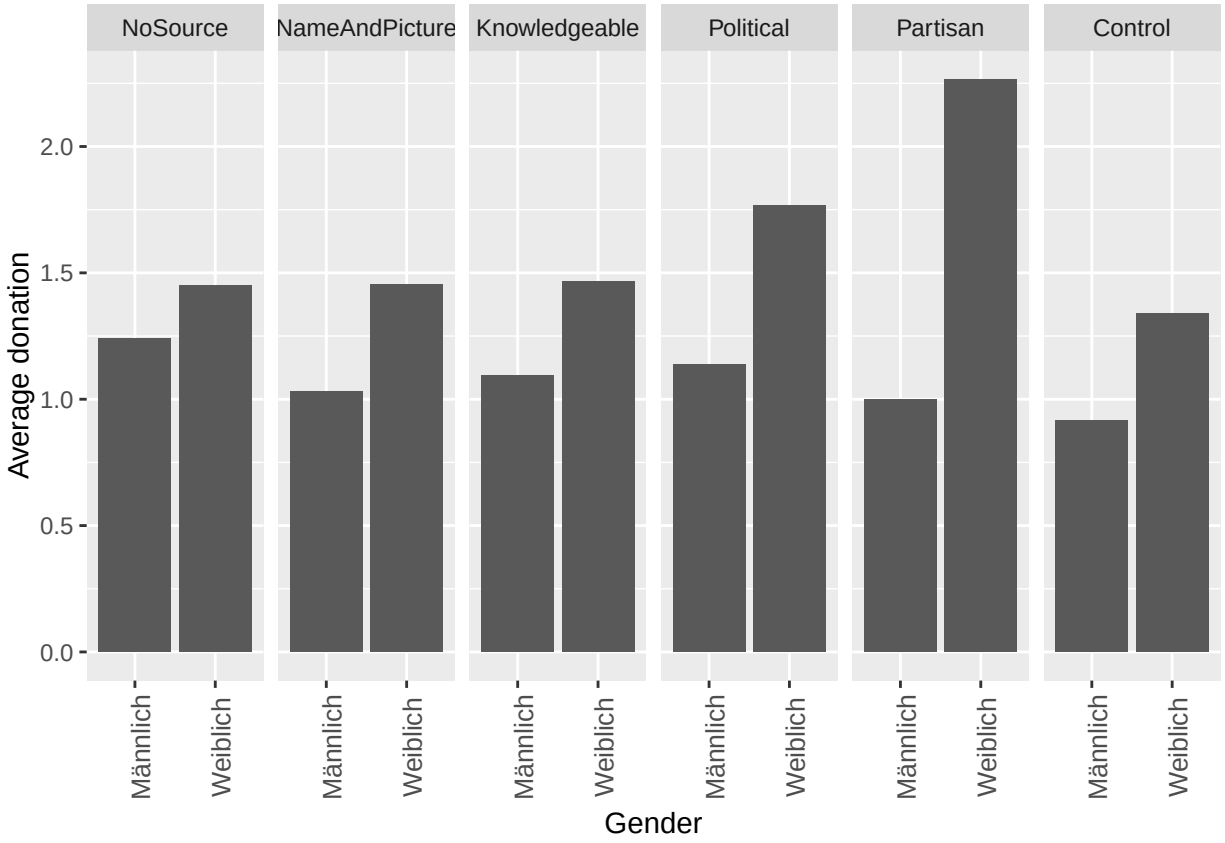

Control
RecNos
DefNos
RecNap
DefNap
RecPol
DefPol
RecPar
DefPar
RecKno
DefKno
2.5
2.0
1.5
1.0
0.5
0.0
Average donation
Männlich
Weiblich
Gender

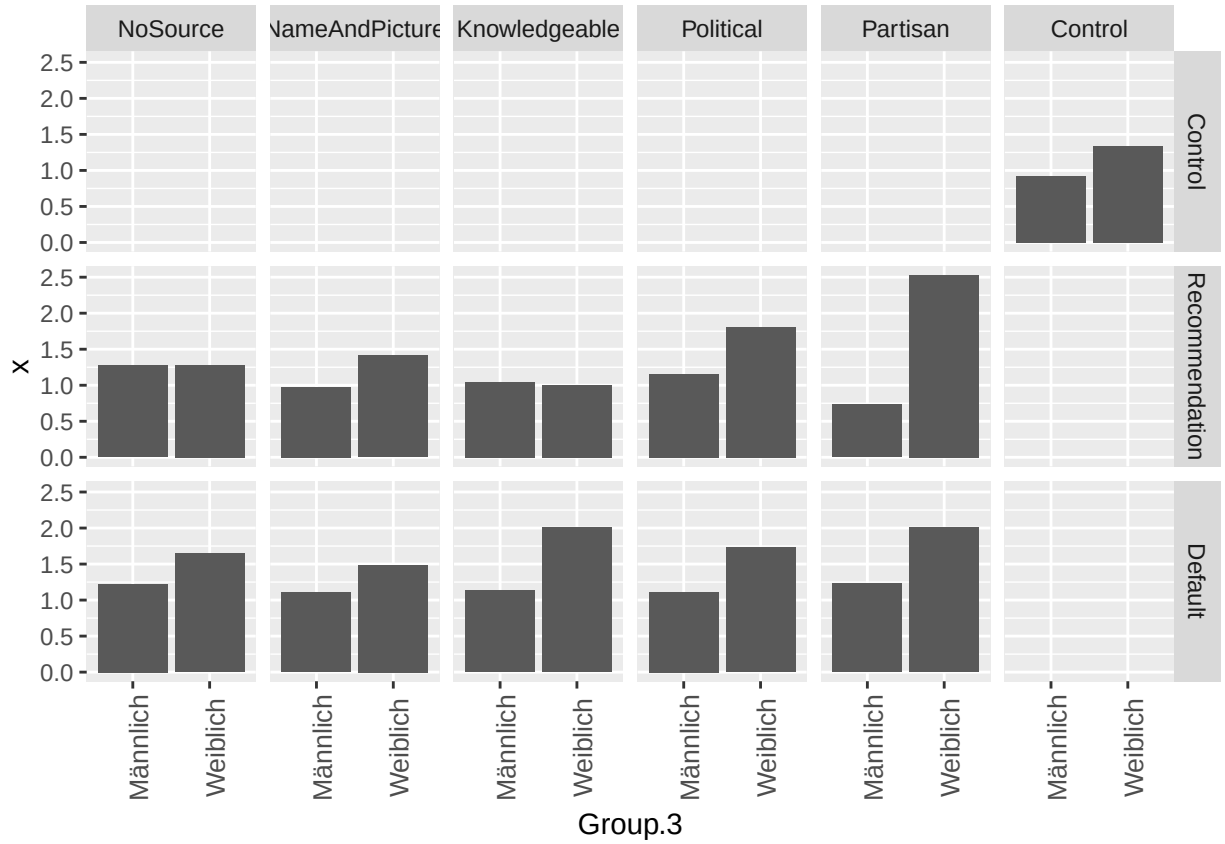
Could be interesting. For example, when looking at Control, RecNos, RecNap, RecPol, RecPar, (And RecKno), the treatment-effect seems to be present for women, but not (or eben negatively) for men. This seems to be also true for Defaults, but slightly different

Gender differences (by Intervention type)



Gender differences (by Source type)





Same as above, the treatment effect seems to be present for females, but only when the source is political or associated with the green party. For males, the treatment effect seems to be zero, or slightly negative.

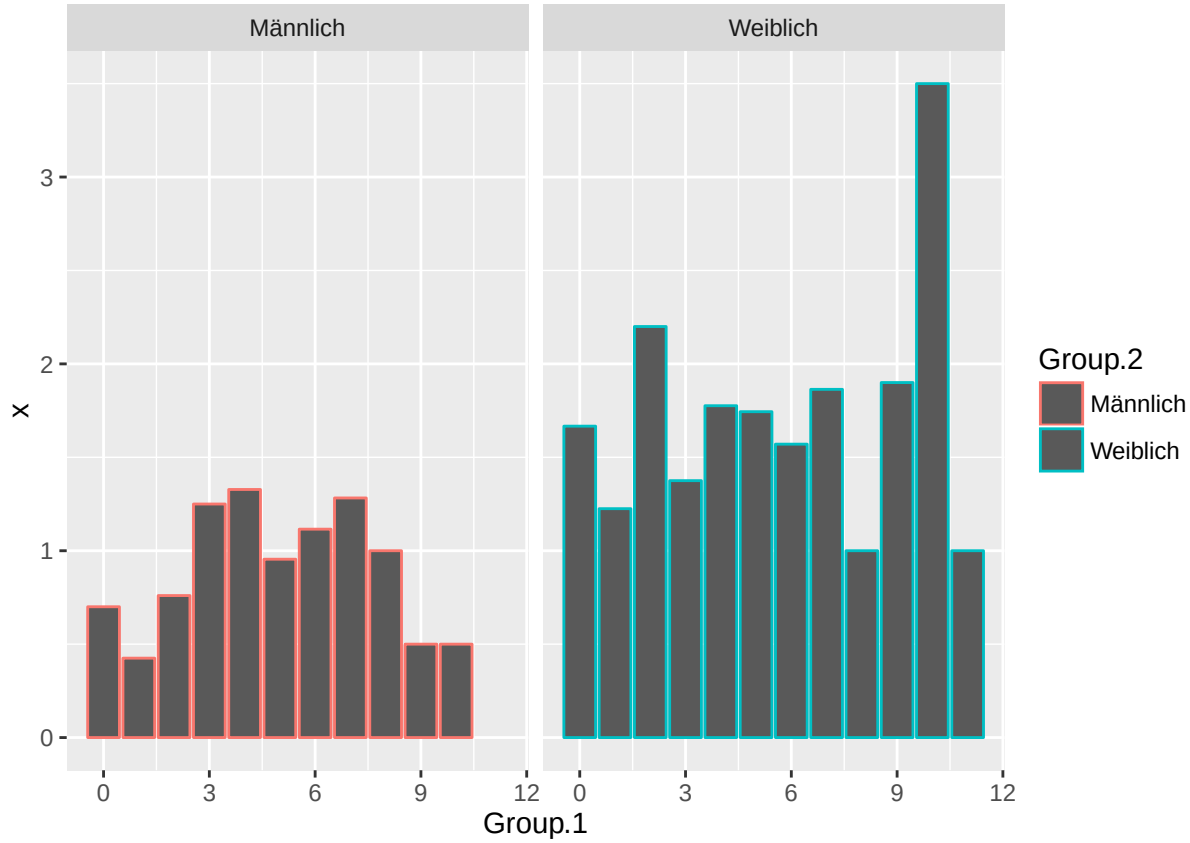
Regression analysis of interaction effect between treatment and gender

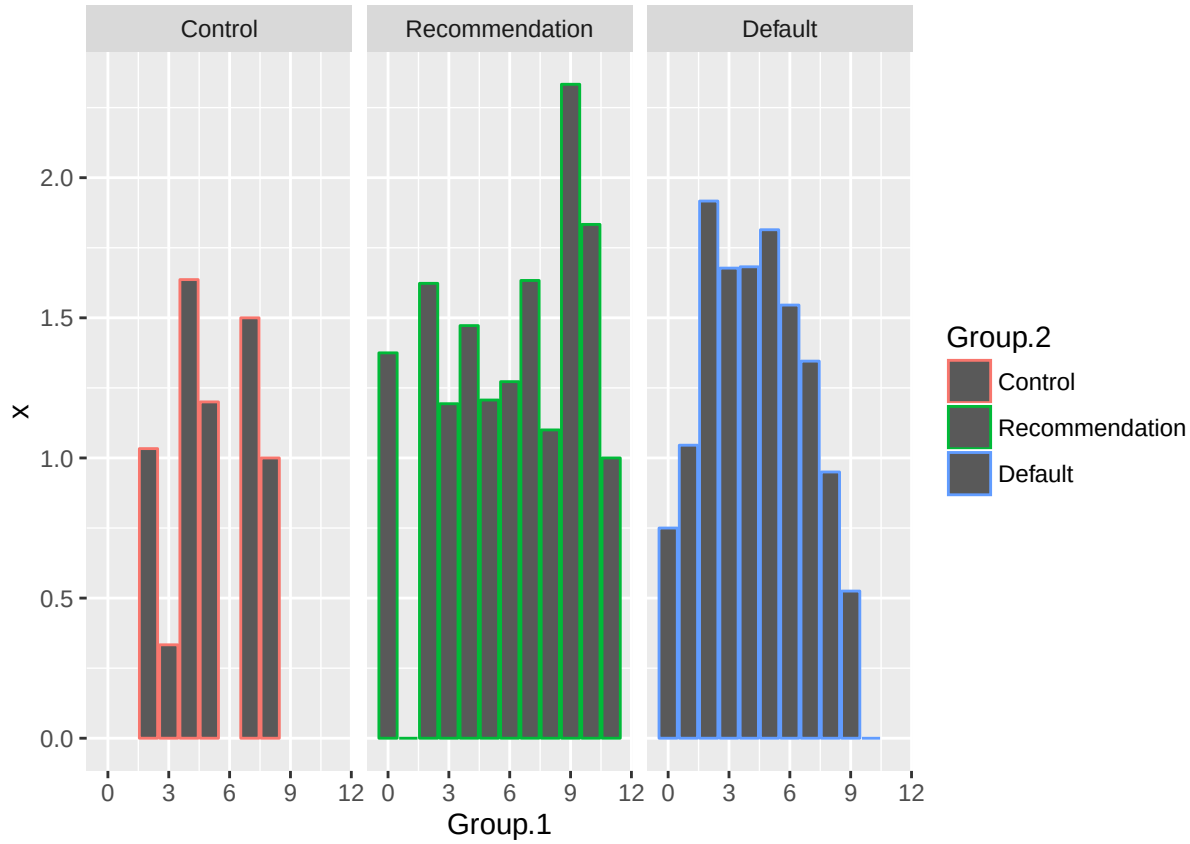
```
summary(lm(Donation ~ treatment*gender, dfsub))
```

```
##
## Call:
## lm(formula = Donation ~ treatment * gender, data = dfsub)
##
## Residuals:
##     Min      1Q  Median      3Q     Max
## -2.5263 -1.1100 -0.2789  0.7778  5.7778
##
## Coefficients:
##                                 Estimate Std. Error t value Pr(>|t|)
## (Intercept)                     0.916667   0.437058   2.097   0.0367 *
## treatmentRecNos                 0.356061   0.631985   0.563   0.5735
## treatmentDefNos                 0.305556   0.564239   0.542   0.5885
## treatmentRecNap                 0.056667   0.586375   0.097   0.9231
## treatmentDefNap                 0.192424   0.631985   0.304   0.7610
## treatmentRecPol                 0.237179   0.606090   0.391   0.6958
## treatmentDefPol                 0.194444   0.667617   0.291   0.7710
## treatmentRecPar                -0.185897   0.606090  -0.307   0.7593
## treatmentDefPar                 0.316667   0.586375   0.540   0.5895
## treatmentRecKno                 0.125000   0.618093   0.202   0.8399
## treatmentDefKno                 0.214583   0.578173   0.371   0.7108
## genderWeiblich                  0.422222   0.564239   0.748   0.4548
## treatmentRecNos:genderWeiblich -0.416002   0.804609  -0.517   0.6055
## treatmentDefNos:genderWeiblich  0.005556   0.767448   0.007   0.9942
## treatmentRecNap:genderWeiblich  0.016209   0.778472   0.021   0.9834
## treatmentDefNap:genderWeiblich -0.044357   0.791463  -0.056   0.9553
## treatmentRecPol:genderWeiblich  0.233932   0.780579   0.300   0.7646
## treatmentDefPol:genderWeiblich  0.193939   0.822953   0.236   0.8138
## treatmentRecPar:genderWeiblich  1.373324   0.784433   1.751   0.0809 .
## treatmentDefPar:genderWeiblich  0.349708   0.769302   0.455   0.6497
## treatmentRecKno:genderWeiblich -0.459127   0.786473  -0.584   0.5598
## treatmentDefKno:genderWeiblich  0.452083   0.767448   0.589   0.5562
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 1.514 on 335 degrees of freedom
## Multiple R-squared:  0.0788, Adjusted R-squared:  0.02105
## F-statistic: 1.365 on 21 and 335 DF,  p-value: 0.1328
```

Still need to verify whether this is equivalent to using dummy variables for the treatments. However, I do not think that the treatment variable is treated as metric.

Gender and Reactance interaction per treatment





Party preference differences

Including only "believers" in Julia Verlinden

First check if whether subjects believe we cooperated depends on treatment

```
##
##        RecNap DefNap RecPol DefPol RecPar DefPar RecKno DefKno
##   Ja       18     24     16     17     16     16     25     21
##   Nein     15     10     17     14     16     18      9     13
```

```
## Warning in chisq.test(table(dfbelA$believe2, dfbelA$treatment)): Chi-
## squared approximation may be incorrect
```

```
##
##  Pearson's Chi-squared test
##
## data:  table(dfbelA$believe2, dfbelA$treatment)
## X-squared = NaN, df = 10, p-value = NA
```

```
##
## Call:
## glm(formula = believe2 ~ treatment, family = "binomial", data = dfbelA)
##
## Deviance Residuals:
##     Min       1Q   Median       3Q      Max
## -1.2278  -1.0961  -0.7842   1.1774   1.6304
##
## Coefficients:
##                 Estimate Std. Error z value Pr(>|z|)
## (Intercept)     -0.18232    0.34960  -0.522    0.602
## treatmentDefNap -0.69315    0.51370  -1.349    0.177
## treatmentRecPol  0.24295    0.49350   0.492    0.623
## treatmentDefPol -0.01183    0.50247  -0.024    0.981
## treatmentRecPar  0.18232    0.49721   0.367    0.714
## treatmentDefPar  0.30010    0.49018   0.612    0.540
## treatmentRecKno -0.83933    0.52281  -1.605    0.108
## treatmentDefKno -0.29725    0.49675  -0.598    0.550
##
## (Dispersion parameter for binomial family taken to be 1)
##
##     Null deviance: 361.00  on 264  degrees of freedom
## Residual deviance: 350.98  on 257  degrees of freedom
## AIC: 366.98
##
## Number of Fisher Scoring iterations: 4
```

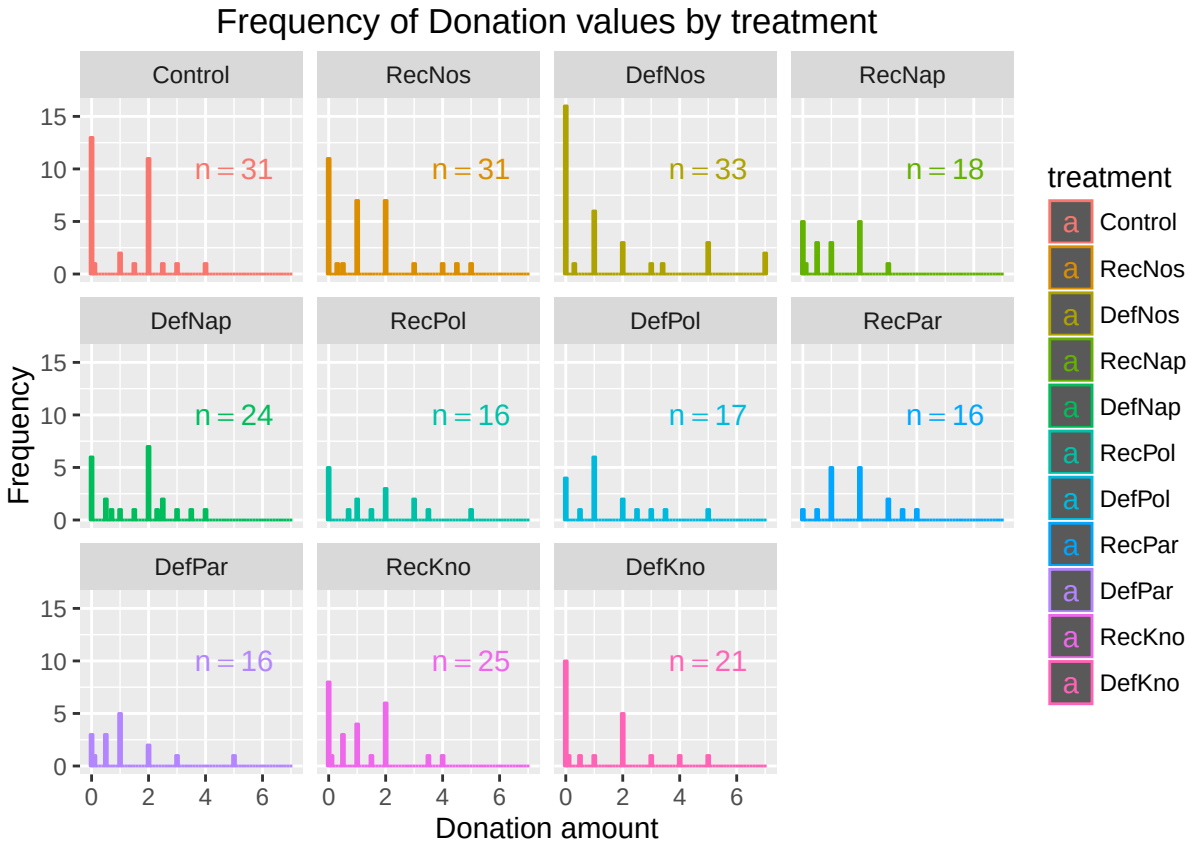
```
##
## Call:
## glm(formula = believe2 ~ Sourcetype * Intervention, family = "binomial",
##     data = dfbelA)
##
```

```
## Deviance Residuals:
##     Min       1Q   Median       3Q      Max
## -1.2278  -1.0961  -0.7842   1.1774   1.6304
##
## Coefficients:
##                                             Estimate Std. Error z value
## (Intercept)                                  -0.1823     0.3496  -0.522
## SourcetypeKnowledgeable                      -0.8393     0.5228  -1.605
## SourcetypePolitical                           0.2429     0.4935   0.492
## SourcetypePartisan                            0.1823     0.4972   0.367
## InterventionDefault                          -0.6931     0.5137  -1.349
## SourcetypeKnowledgeable:InterventionDefault   1.2352     0.7345   1.682
## SourcetypePolitical:InterventionDefault       0.4384     0.7180   0.611
## SourcetypePartisan:InterventionDefault        0.8109     0.7120   1.139
##                                            Pr(>|z|)
## (Intercept)                                  0.6020
## SourcetypeKnowledgeable                      0.1084
## SourcetypePolitical                          0.6225
## SourcetypePartisan                           0.7139
## InterventionDefault                          0.1772
## SourcetypeKnowledgeable:InterventionDefault  0.0926 .
## SourcetypePolitical:InterventionDefault      0.5415
## SourcetypePartisan:InterventionDefault       0.2547
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## (Dispersion parameter for binomial family taken to be 1)
##
##     Null deviance: 361.00  on 264  degrees of freedom
## Residual deviance: 350.98  on 257  degrees of freedom
## AIC: 366.98
##
## Number of Fisher Scoring iterations: 4
```

Check average donations by treatment only for those that believed we cooperated with Julia Verlinden

```
## group: Control
##   vars  n mean   sd median trimmed  mad min max range skew kurtosis   se
## 1    1 31 1.13 1.15      1    1.02 1.48   0   4     4 0.42    -0.94 0.21
## ------------------------------------------------------------
## group: RecNos
##   vars  n mean   sd median trimmed  mad min max range skew kurtosis   se
## 1    1 31 1.24 1.39      1    0.99 1.48   0   5     5 1.14     0.52 0.25
## ------------------------------------------------------------
## group: DefNos
##   vars  n mean   sd median trimmed  mad min max range skew kurtosis   se
## 1    1 33 1.45 2.11    0.3    1.06 0.44   0   7     7 1.41     0.77 0.37
## ------------------------------------------------------------
## group: RecNap
##   vars  n mean   sd median trimmed  mad min max range skew kurtosis   se
## 1    1 18 0.98 0.96   0.75    0.91 1.11   0   3     3  0.5    -1.17 0.23
## ------------------------------------------------------------
```

```
## group: DefNap
##   vars  n mean  sd median trimmed  mad min max range skew kurtosis   se
## 1    1 24  1.5 1.2      2    1.43 1.48   0   4     4 0.18    -1.09 0.25
## ------------------------------------------------------------
## group: RecPol
##   vars  n mean  sd median trimmed  mad min max range skew kurtosis   se
## 1    1 16 1.54 1.5   1.25    1.41 1.85   0   5     5 0.66     -0.6 0.38
## ------------------------------------------------------------
## group: DefPol
##   vars  n mean  sd median trimmed  mad min max range skew kurtosis   se
## 1    1 17 1.44 1.4      1     1.3 1.48   0   5     5 0.98     0.11 0.34
## ------------------------------------------------------------
## group: RecPar
##   vars  n mean   sd median trimmed  mad min max range skew kurtosis   se
## 1    1 16 1.81 1.12      2    1.79 1.48   0   4     4 0.34       -1 0.28
## ------------------------------------------------------------
## group: DefPar
##   vars  n mean   sd median trimmed  mad min max range skew kurtosis   se
## 1    1 16 1.16 1.32      1    0.97 1.04   0   5     5 1.55     1.87 0.33
## ------------------------------------------------------------
## group: RecKno
##   vars  n mean   sd median trimmed  mad min max range skew kurtosis   se
## 1    1 25 1.06 1.14      1    0.91 1.48   0   4     4 0.92     0.02 0.23
## ------------------------------------------------------------
## group: DefKno
##   vars  n mean  sd median trimmed  mad min max range skew kurtosis   se
## 1    1 21 1.12 1.5    0.1    0.86 0.15   0   5     5 1.09     0.11 0.33
```



Treatment interactions with...

... personal Interest and Knowledge w.r.t climate protection

... warm Glow feeling/ feeling of guilt when (not) protecting the climate

... judging carbon offsetting as a efficient way to protect the climate

... moral importance of climate protection

... income

... assessment of sources knowledge and interest w.r.t. climate protection