R Notebook

```
library(MASS)
library(data.table)
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
```

```
library(foreign)
library(knitr)
library(sandwich)
library(lmtest)
```

```
## Loading required package: zoo
##
## Attaching package: 'zoo'
## The following objects are masked from 'package:base':
##
##     as.Date, as.Date.numeric
```

```
library(AER)
```

```
## Loading required package: car
## Loading required package: carData
## Loading required package: survival
```

```
library(ggplot2)
library(gridExtra)
library(cowplot)
```

```
##
## ************************************************************
## Note: As of version 1.0.0, cowplot does not change the
##   default ggplot2 theme anymore. To recover the previous
##   behavior, execute:
##   theme_set(theme_cowplot())
## ************************************************************
```

```
library(ggthemes)
```

```
##
## Attaching package: 'ggthemes'
## The following object is masked from 'package:cowplot':
##
##     theme_map
```

```r
library(MatchIt)
#prevent scientific notation
options(scipen=999)
```

```r
d_raw <- fread('./FinalData_AJ.csv')
```

```r
d_raw
```

```
##           StartDate        EndDate     Status      IPAddress Progress
##   1: 11/26/19 10:39 11/26/19 10:46 IP Address 72.185.190.207      100
##   2: 11/26/19 10:39 11/26/19 10:46 IP Address  173.125.53.21      100
##   3: 11/26/19 10:39 11/26/19 10:46 IP Address  69.18.228.209      100
##   4: 11/26/19 10:39 11/26/19 10:47 IP Address  73.142.142.53      100
##   5: 11/26/19 10:38 11/26/19 10:48 IP Address  68.70.176.230      100
##  ---
## 566:  11/28/19 1:56  11/28/19 1:56 IP Address  50.239.137.61       29
## 567:  11/28/19 2:00  11/28/19 2:01 IP Address  91.207.175.43       29
## 568:  11/28/19 1:40  11/28/19 2:11 IP Address   96.84.165.99       35
## 569:  11/28/19 3:18  11/28/19 3:18 IP Address  161.129.69.11       29
## 570:  11/28/19 3:37  11/28/19 3:42 IP Address 108.67.233.215       35
##      Duration (in seconds) Finished   RecordedDate        ResponseId
##   1:                   430     TRUE 11/26/19 10:46 R_1pFCJGo3hGlfjTQ
##   2:                   441     TRUE 11/26/19 10:46 R_1CmhDhQ3nv8MY2B
##   3:                   459     TRUE 11/26/19 10:46 R_3KZaQbtXwELqxHw
##   4:                   488     TRUE 11/26/19 10:47 R_1KmdCWUEFHQm1n3
##   5:                   555     TRUE 11/26/19 10:48 R_A53r1jErX3LVeSd
##  ---
## 566:                    18    FALSE  11/29/19 1:56 R_3mfoXsPO9OEwQ2R
## 567:                    52    FALSE  11/29/19 2:02 R_3CNLcTO0txqKsFG
## 568:                  1859    FALSE  11/29/19 2:12 R_2SIAjvMzYNaRF1X
## 569:                    12    FALSE  11/29/19 3:18 R_3noLIxngkKxyGnZ
## 570:                   336    FALSE  11/29/19 3:43 R_31baxn75mAZOUWM
##      RecipientLastName RecipientFirstName RecipientEmail ExternalReference
##   1:                NA                 NA             NA                NA
##   2:                NA                 NA             NA                NA
##   3:                NA                 NA             NA                NA
##   4:                NA                 NA             NA                NA
##   5:                NA                 NA             NA                NA
##  ---
## 566:                NA                 NA             NA                NA
## 567:                NA                 NA             NA                NA
## 568:                NA                 NA             NA                NA
## 569:                NA                 NA             NA                NA
## 570:                NA                 NA             NA                NA
##      LocationLatitude LocationLongitude DistributionChannel UserLanguage
##   1:         28.21370          -82.6809           anonymous            EN
##   2:         33.74850          -84.3871           anonymous            EN
##   3:         38.73441          -98.1992           anonymous            EN
##   4:         41.60260          -72.9765           anonymous            EN
##   5:         41.66969          -83.6071           anonymous            EN
##  ---
## 566:               NA                NA           anonymous            EN
## 567:               NA                NA           anonymous            EN
## 568:               NA                NA           anonymous            EN
```

```
## 569:              NA               NA          anonymous           EN
## 570:              NA               NA          anonymous           EN
##      QID34 Q4_First Click Q4_Last Click Q4_Page Submit Q4_Click Count
##   1:   Yes             NA            NA              NA             NA
##   2:   Yes             NA            NA              NA             NA
##   3:   Yes             NA            NA              NA             NA
##   4:   Yes             NA            NA              NA             NA
##   5:   Yes             NA            NA              NA             NA
##  ---
## 566:   Yes             NA            NA              NA             NA
## 567:   Yes             NA            NA              NA             NA
## 568:   Yes             NA            NA              NA             NA
## 569:   Yes             NA            NA              NA             NA
## 570:   Yes             NA            NA              NA             NA
##      Q27_First Click Q27_Last Click Q27_Page Submit Q27_Click Count
##   1:              NA             NA              NA              NA
##   2:              NA             NA              NA              NA
##   3:              NA             NA              NA              NA
##   4:              NA             NA              NA              NA
##   5:              NA             NA              NA              NA
##  ---
## 566:              NA             NA              NA              NA
## 567:              NA             NA              NA              NA
## 568:              NA             NA              NA              NA
## 569:              NA             NA              NA              NA
## 570:              NA             NA              NA              NA
##      Q5_First Click Q5_Last Click Q5_Page Submit Q5_Click Count
##   1:         58.752        58.752         96.654              1
##   2:             NA            NA             NA             NA
##   3:             NA            NA             NA             NA
##   4:          0.000         0.000        113.046              0
##   5:             NA            NA             NA             NA
##  ---
## 566:             NA            NA             NA             NA
## 567:             NA            NA             NA             NA
## 568:         61.212        61.212        139.928              1
## 569:             NA            NA             NA             NA
## 570:             NA            NA             NA             NA
##      Q29_First Click Q29_Last Click Q29_Page Submit Q29_Click Count
##   1:               0              0         300.794               0
##   2:              NA             NA              NA              NA
##   3:              NA             NA              NA              NA
##   4:               0              0         304.273               0
##   5:              NA             NA              NA              NA
##  ---
## 566:              NA             NA              NA              NA
## 567:              NA             NA              NA              NA
## 568:              NA             NA              NA              NA
## 569:              NA             NA              NA              NA
## 570:              NA             NA              NA              NA
##      Q31_First Click Q31_Last Click Q31_Page Submit Q31_Click Count
##   1:              NA             NA              NA              NA
##   2:               0              0         131.937               0
##   3:               0              0         132.702               0
```

```
##   4:              NA             NA              NA              NA
##   5:               0              0         151.207               0
##  ---
## 566:              NA             NA              NA              NA
## 567:              NA             NA              NA              NA
## 568:              NA             NA              NA              NA
## 569:              NA             NA              NA              NA
## 570:               0              0         137.000               0
##      Q28_First Click Q28_Last Click Q28_Page Submit Q28_Click Count
##   1:              NA             NA              NA              NA
##   2:               0              0         248.746               0
##   3:               0              0         251.117               0
##   4:              NA             NA              NA              NA
##   5:               0              0         245.336               0
##  ---
## 566:              NA             NA              NA              NA
## 567:              NA             NA              NA              NA
## 568:              NA             NA              NA              NA
## 569:              NA             NA              NA              NA
## 570:              NA             NA              NA              NA
##      Q24_First Click Q24_Last Click SurveyTime Q24_Click Count
##   1:           1.837          17.516     18.918               7
##   2:           2.630          23.990     25.175               7
##   3:           3.001          27.777     28.757               7
##   4:           2.456          31.639     32.701               7
##   5:           2.143          30.010     32.272               8
##  ---
## 566:              NA             NA         NA              NA
## 567:              NA             NA         NA              NA
## 568:              NA             NA         NA              NA
## 569:              NA             NA         NA              NA
## 570:              NA             NA         NA              NA
##                    Y1                         Y2                Y3
##   1:    Strongly agree            Strongly agree Strongly disagree
##   2:    Somewhat agree            Somewhat agree Somewhat disagree
##   3: Strongly disagree            Somewhat agree    Strongly agree
##   4: Somewhat disagree Neither agree nor disagree Somewhat disagree
##   5:    Somewhat agree            Somewhat agree Somewhat disagree
##  ---
## 566:
## 567:
## 568:
## 569:
## 570:
##                    Y4                         Y5
##   1:    Strongly agree          Strongly disagree
##   2:    Somewhat agree          Somewhat disagree
##   3: Strongly disagree             Strongly agree
##   4: Somewhat disagree Neither agree nor disagree
##   5:    Somewhat agree          Somewhat disagree
##  ---
## 566:
## 567:
## 568:
```

```
## 569:
## 570:
##                            Y6                         Y7 Q25_First Click
##   1: Neither agree nor disagree          Somewhat disagree              NA
##   2:             Somewhat agree             Somewhat agree           1.350
##   3:          Strongly disagree             Strongly agree           1.210
##   4:             Somewhat agree Neither agree nor disagree           1.002
##   5:             Somewhat agree             Somewhat agree           1.024
##  ---
## 566:                                                                    NA
## 567:                                                                    NA
## 568:                                                                    NA
## 569:                                                                    NA
## 570:                                                                    NA
##      Q25_Last Click CovariateTime Q25_Click Count         Age
##   1:             NA            NA               NA
##   2:         23.526        24.363                9 35-44 years
##   3:         32.537        33.476                9 35-44 years
##   4:         23.083        24.266                9 25-34 years
##   5:         23.256        24.438                9 35-44 years
##  ---
## 566:             NA            NA               NA
## 567:             NA            NA               NA
## 568:             NA            NA               NA
## 569:             NA            NA               NA
## 570:             NA            NA               NA
##                Education Gender LivingAreaAffected ClimateChangeAwareness
##   1:
##   2:  Professional degree   Male                 No                     No
##   3:         Some college   Male                 No                    Yes
##   4: High school graduate   Male                 No                     No
##   5:        4 year degree   Male                 No                     No
##  ---
## 566:
## 567:
## 568:
## 569:
## 570:
##           PreTreatment              Income         PoliticalView Community
##   1:
##   2:    Somewhat agree $100,000 - $149,000 Slightly Conservative  Suburban
##   3: Strongly disagree   Less than $50,000     Very Conservative     Rural
##   4:    Somewhat agree   $50,000 - $74,000      Slightly Liberal     Rural
##   5:    Somewhat agree   $75,000 - $99,000 Slightly Conservative     Rural
##  ---
## 566:
## 567:
## 568:
## 569:
## 570:
##      AlwaysTrue Create New Field or Choose From Dropdown...    mTurkCode
##   1:          1                                          NA 663236000000
##   2:          1                                          NA 581543000000
##   3:          1                                          NA  87615467608
```

```
##   4:          1                                          NA 690726000000
##   5:          1                                          NA 735159000000
##  ---
## 566:          1                                          NA 720586000000
## 567:          1                                          NA 274891000000
## 568:          1                                          NA 143948000000
## 569:          1                                          NA 528633000000
## 570:          1                                          NA 211754000000
##              Group RejectedOutcomeQuestions RejectedCovariateQuestions
##   1: AntiTreatment                      Yes
##   2:       Placebo
##   3:       Placebo
##   4: AntiTreatment
##   5:       Placebo
##  ---
## 566:     Treatment
## 567:     Treatment
## 568: AntiTreatment
## 569: AntiTreatment
## 570:       Placebo
```

```
#Subset the columns from raw data into data table on which we would work
columns <- c("Progress","Y1","Y2","Y3","Y4","Y5","Y6","Y7",
             "Age","Education","Gender","LivingAreaAffected","ClimateChangeAwareness",
             "PreTreatment","Income","PoliticalView","Community","Group","SurveyTime",
             "CovariateTime","RejectedOutcomeQuestions","RejectedCovariateQuestions")
d <- d_raw[,..columns]
#Create lookup for likert scales one for positive questions
support_likert_scale <- c('Strongly agree'=5,'Strongly Agree'=5,
                          'Somewhat agree'=4,'Somewhat Agree'=4,
                          'Neither agree nor disagree'=3,'Neither Agree nor Disagree'=3,
                          'Neither agree or disagree'=3,'Neither Agree or Disagree'=3,
                          'Somewhat disagree'=2,'Somewhat Disagree'=2,
                          'Strongly disagree'=1,'Strongly Disagree'=1)
#lookup for negative questions 4 and 6

anti_likert_scale <- c('Strongly agree'=1,'Strongly Agree'=1,
                          'Somewhat agree'=2,'Somewhat Agree'=2,
                          'Neither agree nor disagree'=3,'Neither Agree nor Disagree'=3,
                          'Neither agree or disagree'=3,'Neither Agree or Disagree'=3,
                          'Somewhat disagree'=4,'Somewhat Disagree'=4,
                          'Strongly disagree'=5,'Strongly Disagree'=5)


#convert character to numeric value for the likert scale output variables
#d[,Y1_num:=support_likert_scale[Y1]]
#d[,Y2_num:=support_likert_scale[Y2]]
#d[,Y3_num:=support_likert_scale[Y3]]
#d[,Y4_num:=anti_likert_scale[Y4]]
#d[,Y5_num:=support_likert_scale[Y5]]
#d[,Y6_num:=anti_likert_scale[Y6]]
#d[,Y7_num:=support_likert_scale[Y7]]

d[,c("Y1_num","Y2_num","Y3_num","Y4_num","Y5_num","Y6_num","Y7_num") :=
```

```
    list(support_likert_scale[Y1],
      support_likert_scale[Y2],
      anti_likert_scale[Y3],
      support_likert_scale[Y4],
      anti_likert_scale[Y5],
      support_likert_scale[Y6],
      support_likert_scale[Y7])
 ]
#Add ordered factor for the Y_nums
d[,c("Y1_num_factor","Y2_num_factor","Y3_num_factor","Y4_num_factor",
     "Y5_num_factor","Y6_num_factor","Y7_num_factor") :=
    list(factor(Y1_num,ordered=T,levels=c(1,2,3,4,5)),
      factor(Y2_num,ordered=T,levels=c(1,2,3,4,5)),
      factor(Y3_num,ordered=T,levels=c(1,2,3,4,5)),
      factor(Y4_num,ordered=T,levels=c(1,2,3,4,5)),
      factor(Y5_num,ordered=T,levels=c(1,2,3,4,5)),
      factor(Y6_num,ordered=T,levels=c(1,2,3,4,5)),
      factor(Y7_num,ordered=T,levels=c(1,2,3,4,5))
      )
 ]

#add factor variables for the covariates
d[,c("Age_factor","Education_factor","Gender_factor","LivingAreaAffected_factor",
     "ClimateChangeAwareness_factor","PreTreatment_factor","Income_factor",
     "PoliticalView_factor","Community_factor") :=
    list(factor(Age,ordered=T,levels=c("Less than 25 years",
                                "25-34 years",
                                "35-44 years",
                                "45-54 years",
                                "55 years or older")),
         factor(Education,ordered=T,levels=c("Less than high school",
                                             "High school graduate",
                                             "Some college",
                                             "2 year degree",
                                             "4 year degree",
                                             "Professional degree",
                                             "Doctorate"
                                            )),
         factor(Gender,ordered=F,levels=c("",
                                          "Male",
                                          "Female",
                                          "Other")),
         factor(LivingAreaAffected,ordered=T,levels=c("No","Yes")),
         factor(ClimateChangeAwareness,ordered=T,levels=c("","No","Yes")),
         factor(PreTreatment,ordered=T,levels=c("",
                                                "Strongly disagree",
                                                "Somewhat disagree",
                                                "Neither agree nor disagree",
                                                "Somewhat agree",
                                                "Strongly agree"
                                               )),
         factor(Income,ordered=T,levels=c("Less than $50,000",
                                          "$50,000 - $74,000",
```

```
                                        "$75,000 - $99,000",
                                        "$100,000 - $149,000",
                                        "More than $150,000")),
        factor(PoliticalView,ordered=F,levels=c("Very Liberal",
                                                "Slightly Liberal",
                                                "Slightly Conservative",
                                                "Very Conservative",
                                                "Neither Conservative nor Liberal")),
        factor(Community,ordered=F,levels=c("Urban",
                                            "Suburban",
                                            "Rural"
                                            ))
        )]
```

```
d[!is.na(Y1_num)&Progress==100&RejectedOutcomeQuestions!="Yes"&RejectedCovariateQuestions!="Yes",
  .(mean(Y1_num,na.rm = T),mean(Y2_num,na.rm = T), mean(Y3_num,na.rm =T), mean(Y4_num,na.rm =T),
    mean(Y5_num,na.rm =T),mean(Y6_num,na.rm =T),mean(Y7_num,na.rm =T)),
  by=Group]
```

```
##            Group       V1       V2       V3    V4       V5       V6
## 1:       Placebo 4.052174 4.304348 3.208696 3.800 3.321739 3.739130
## 2: AntiTreatment 3.658333 3.816667 2.958333 3.225 3.158333 3.591667
## 3:     Treatment 4.440367 4.449541 3.403670 4.000 3.532110 3.990826
##          V7
## 1: 4.434783
## 2: 3.650000
## 3: 4.311927
```

```
d[!is.na(Y1_num)&Progress==100&RejectedOutcomeQuestions!="Yes"&RejectedCovariateQuestions!="Yes",
  .(sd(Y1_num,na.rm = T),sd(Y2_num,na.rm = T), sd(Y3_num,na.rm =T), sd(Y4_num,na.rm =T),
    sd(Y5_num,na.rm =T),sd(Y6_num,na.rm =T),sd(Y7_num,na.rm =T)),
  by=Group]
```

```
##            Group        V1        V2       V3       V4       V5       V6
## 1:       Placebo 1.1458811 0.9097321 1.373277 1.222594 1.466275 1.185341
## 2: AntiTreatment 1.4230742 1.3156034 1.259557 1.299402 1.390217 1.103819
## 3:     Treatment 0.9470343 0.8973855 1.233178 1.088662 1.424448 1.067148
##           V7
## 1: 0.7390183
## 2: 1.3698433
## 3: 0.9971928
```

#Covariate balance check

```
#test for covariate balance
#subset placebo and treatment
d_treatment_exp <- d[Group %in% c('Placebo','Treatment')&!is.na(Y1_num)&Progress==100&RejectedOutcomeQu
d_treatment_exp[,treat_dummy:=ifelse(Group=='Placebo',0,1)]
lm1_treat <- d_treatment_exp[,lm(treat_dummy~1)]
lm2_treat <- d_treatment_exp[,lm(treat_dummy~Age_factor+Education_factor+Gender_factor+ LivingAreaAffec
( anova_test_report_treat_exp <- anova(lm1_treat,lm2_treat,test='F') )
```

```
## Analysis of Variance Table
##
## Model 1: treat_dummy ~ 1
## Model 2: treat_dummy ~ Age_factor + Education_factor + Gender_factor +
```

```
##     LivingAreaAffected_factor + ClimateChangeAwareness_factor +
##     PreTreatment_factor + Income_factor + PoliticalView_factor +
##     Community_factor
##   Res.Df    RSS Df Sum of Sq      F Pr(>F)
## 1    223 55.960
## 2    193 48.386 30    7.5742 1.0071 0.4629
```

```
#subset placebo and antitreatment
d_antitreatment_exp <- d[Group %in% c('Placebo','AntiTreatment')&!is.na(Y1_num)&Progress==100&RejectedOu
d_antitreatment_exp[,treat_dummy:=ifelse(Group=='Placebo',0,1)]
lm1_antitreat <- d_antitreatment_exp[,lm(treat_dummy~1)]
lm2_antitreat <- d_antitreatment_exp[,lm(treat_dummy~Age_factor+Education_factor+Gender_factor+ LivingAr
( anova_test_report_antitreat_exp <- anova(lm1_antitreat,lm2_antitreat,test='F') )
```

```
## Analysis of Variance Table
##
## Model 1: treat_dummy ~ 1
## Model 2: treat_dummy ~ Age_factor + Education_factor + Gender_factor +
##     LivingAreaAffected_factor + ClimateChangeAwareness_factor +
##     PreTreatment_factor + Income_factor + PoliticalView_factor +
##     Community_factor
##   Res.Df    RSS Df Sum of Sq      F Pr(>F)
## 1    234 58.723
## 2    204 51.030 30    7.6931 1.0251 0.4371
```

```
m.out = matchit(treat_dummy ~ Age_factor + Education_factor + Gender_factor +
                LivingAreaAffected_factor + ClimateChangeAwareness_factor +
                PreTreatment_factor + Income_factor + PoliticalView_factor +
                Community_factor,
                data = d_treatment_exp, method = "nearest",
                ratio = 1)
summary(m.out)
```

```
##
## Call:
## matchit(formula = treat_dummy ~ Age_factor + Education_factor +
##     Gender_factor + LivingAreaAffected_factor + ClimateChangeAwareness_factor +
##     PreTreatment_factor + Income_factor + PoliticalView_factor +
##     Community_factor, data = d_treatment_exp, method = "nearest",
##     ratio = 1)
##
## Summary of balance for all data:
##                                                  Means Treated
## distance                                                0.5558
## Age_factorLess than 25 years                            0.1009
## Age_factor25-34 years                                   0.4495
## Age_factor35-44 years                                   0.1835
## Age_factor45-54 years                                   0.1376
## Age_factor55 years or older                             0.1284
## Education_factor.L                                      0.1144
## Education_factor.Q                                     -0.2462
## Education_factor.C                                     -0.2097
## Education_factor^4                                     -0.0636
## Education_factor^5                                      0.1902
## Education_factor^6                                      0.2083
```

```
## Gender_factorMale                                          0.6422
## Gender_factorFemale                                        0.3394
## Gender_factorOther                                         0.0000
## LivingAreaAffected_factor.L                               -0.0195
## ClimateChangeAwareness_factor.L                            0.5384
## ClimateChangeAwareness_factor.Q                            0.1161
## PreTreatment_factor.L                                      0.4222
## PreTreatment_factor.Q                                      0.2002
## PreTreatment_factor.C                                      0.0547
## PreTreatment_factor^4                                     -0.0277
## PreTreatment_factor^5                                     -0.0324
## Income_factor.L                                           -0.3307
## Income_factor.Q                                            0.0294
## Income_factor.C                                            0.0087
## Income_factor^4                                           -0.0779
## PoliticalView_factorSlightly Liberal                       0.3394
## PoliticalView_factorSlightly Conservative                  0.1651
## PoliticalView_factorVery Conservative                      0.2202
## PoliticalView_factorNeither Conservative nor Liberal       0.0826
## Community_factorSuburban                                   0.4220
## Community_factorRural                                      0.1468
##                                                    Means Control
## distance                                                   0.4210
## Age_factorLess than 25 years                               0.0174
## Age_factor25-34 years                                      0.5217
## Age_factor35-44 years                                      0.2522
## Age_factor45-54 years                                      0.1043
## Age_factor55 years or older                                0.1043
## Education_factor.L                                         0.1052
## Education_factor.Q                                        -0.2201
## Education_factor.C                                        -0.1846
## Education_factor^4                                        -0.0897
## Education_factor^5                                         0.1442
## Education_factor^6                                         0.2311
## Gender_factorMale                                          0.6000
## Gender_factorFemale                                        0.3739
## Gender_factorOther                                         0.0087
## LivingAreaAffected_factor.L                               -0.0922
## ClimateChangeAwareness_factor.L                            0.4366
## ClimateChangeAwareness_factor.Q                           -0.0390
## PreTreatment_factor.L                                      0.3627
## PreTreatment_factor.Q                                      0.1243
## PreTreatment_factor.C                                      0.0253
## PreTreatment_factor^4                                     -0.0444
## PreTreatment_factor^5                                     -0.0016
## Income_factor.L                                           -0.3135
## Income_factor.Q                                           -0.0186
## Income_factor.C                                            0.0632
## Income_factor^4                                           -0.0260
## PoliticalView_factorSlightly Liberal                       0.3043
## PoliticalView_factorSlightly Conservative                  0.2696
## PoliticalView_factorVery Conservative                      0.2000
## PoliticalView_factorNeither Conservative nor Liberal       0.0696
## Community_factorSuburban                                   0.4087
```

```
## Community_factorRural                                    0.1304
##                                                    SD Control Mean Diff
## distance                                                 0.1778    0.1348
## Age_factorLess than 25 years                             0.1313    0.0835
## Age_factor25-34 years                                    0.5017   -0.0722
## Age_factor35-44 years                                    0.4362   -0.0687
## Age_factor45-54 years                                    0.3070    0.0333
## Age_factor55 years or older                              0.3070    0.0241
## Education_factor.L                                       0.2455    0.0093
## Education_factor.Q                                       0.1851   -0.0261
## Education_factor.C                                       0.3556   -0.0251
## Education_factor^4                                       0.3198    0.0261
## Education_factor^5                                       0.4788    0.0460
## Education_factor^6                                       0.3671   -0.0229
## Gender_factorMale                                        0.4920    0.0422
## Gender_factorFemale                                      0.4860   -0.0345
## Gender_factorOther                                       0.0933   -0.0087
## LivingAreaAffected_factor.L                              0.7041    0.0728
## ClimateChangeAwareness_factor.L                          0.3577    0.1019
## ClimateChangeAwareness_factor.Q                          0.5923    0.1552
## PreTreatment_factor.L                                    0.2814    0.0594
## PreTreatment_factor.Q                                    0.4015    0.0759
## PreTreatment_factor.C                                    0.4216    0.0294
## PreTreatment_factor^4                                    0.3968    0.0166
## PreTreatment_factor^5                                    0.3377   -0.0307
## Income_factor.L                                          0.3092   -0.0173
## Income_factor.Q                                          0.4403    0.0480
## Income_factor.C                                          0.4573   -0.0545
## Income_factor^4                                          0.4519   -0.0519
## PoliticalView_factorSlightly Liberal                     0.4621    0.0351
## PoliticalView_factorSlightly Conservative                0.4457   -0.1044
## PoliticalView_factorVery Conservative                    0.4018    0.0202
## PoliticalView_factorNeither Conservative nor Liberal     0.2555    0.0130
## Community_factorSuburban                                 0.4937    0.0133
## Community_factorRural                                    0.3383    0.0164
##                                                    eQQ Med eQQ Mean
## distance                                            0.1238   0.1383
## Age_factorLess than 25 years                        0.0000   0.0917
## Age_factor25-34 years                               0.0000   0.0642
## Age_factor35-44 years                               0.0000   0.0642
## Age_factor45-54 years                               0.0000   0.0367
## Age_factor55 years or older                         0.0000   0.0275
## Education_factor.L                                  0.0000   0.0243
## Education_factor.Q                                  0.0000   0.0210
## Education_factor.C                                  0.0000   0.0225
## Education_factor^4                                  0.0000   0.0333
## Education_factor^5                                  0.0000   0.0490
## Education_factor^6                                  0.0000   0.0211
## Gender_factorMale                                   0.0000   0.0459
## Gender_factorFemale                                 0.0000   0.0275
## Gender_factorOther                                  0.0000   0.0092
## LivingAreaAffected_factor.L                         0.0000   0.0778
## ClimateChangeAwareness_factor.L                     0.0000   0.1038
## ClimateChangeAwareness_factor.Q                     0.0000   0.1573
```

```
## PreTreatment_factor.L                                0.0000   0.0636
## PreTreatment_factor.Q                                0.0000   0.0781
## PreTreatment_factor.C                                0.0000   0.0438
## PreTreatment_factor^4                                0.0000   0.0364
## PreTreatment_factor^5                                0.0000   0.0393
## Income_factor.L                                      0.0000   0.0377
## Income_factor.Q                                      0.0000   0.0539
## Income_factor.C                                      0.0000   0.0464
## Income_factor^4                                      0.0000   0.0439
## PoliticalView_factorSlightly Liberal                 0.0000   0.0367
## PoliticalView_factorSlightly Conservative            0.0000   0.1009
## PoliticalView_factorVery Conservative                0.0000   0.0275
## PoliticalView_factorNeither Conservative nor Liberal 0.0000   0.0183
## Community_factorSuburban                             0.0000   0.0183
## Community_factorRural                                0.0000   0.0183
##                                                     eQQ Max
## distance                                             0.2916
## Age_factorLess than 25 years                         1.0000
## Age_factor25-34 years                                1.0000
## Age_factor35-44 years                                1.0000
## Age_factor45-54 years                                1.0000
## Age_factor55 years or older                          1.0000
## Education_factor.L                                   0.1890
## Education_factor.Q                                   0.5455
## Education_factor.C                                   0.4082
## Education_factor^4                                   0.6447
## Education_factor^5                                   0.4364
## Education_factor^6                                   0.4606
## Gender_factorMale                                    1.0000
## Gender_factorFemale                                  1.0000
## Gender_factorOther                                   1.0000
## LivingAreaAffected_factor.L                          1.4142
## ClimateChangeAwareness_factor.L                      0.7071
## ClimateChangeAwareness_factor.Q                      1.2247
## PreTreatment_factor.L                                0.2390
## PreTreatment_factor.Q                                0.6547
## PreTreatment_factor.C                                0.5963
## PreTreatment_factor^4                                0.7559
## PreTreatment_factor^5                                0.5669
## Income_factor.L                                      0.3162
## Income_factor.Q                                      0.8018
## Income_factor.C                                      0.6325
## Income_factor^4                                      0.5976
## PoliticalView_factorSlightly Liberal                 1.0000
## PoliticalView_factorSlightly Conservative            1.0000
## PoliticalView_factorVery Conservative                1.0000
## PoliticalView_factorNeither Conservative nor Liberal 1.0000
## Community_factorSuburban                             1.0000
## Community_factorRural                                1.0000
##
##
## Summary of balance for matched data:
##                                                    Means Treated
## distance                                                  0.5558
```

```
## Age_factorLess than 25 years                                    0.1009
## Age_factor25-34 years                                           0.4495
## Age_factor35-44 years                                           0.1835
## Age_factor45-54 years                                           0.1376
## Age_factor55 years or older                                     0.1284
## Education_factor.L                                              0.1144
## Education_factor.Q                                             -0.2462
## Education_factor.C                                             -0.2097
## Education_factor^4                                             -0.0636
## Education_factor^5                                              0.1902
## Education_factor^6                                              0.2083
## Gender_factorMale                                               0.6422
## Gender_factorFemale                                             0.3394
## Gender_factorOther                                              0.0000
## LivingAreaAffected_factor.L                                    -0.0195
## ClimateChangeAwareness_factor.L                                 0.5384
## ClimateChangeAwareness_factor.Q                                 0.1161
## PreTreatment_factor.L                                           0.4222
## PreTreatment_factor.Q                                           0.2002
## PreTreatment_factor.C                                           0.0547
## PreTreatment_factor^4                                          -0.0277
## PreTreatment_factor^5                                          -0.0324
## Income_factor.L                                                -0.3307
## Income_factor.Q                                                 0.0294
## Income_factor.C                                                 0.0087
## Income_factor^4                                                -0.0779
## PoliticalView_factorSlightly Liberal                            0.3394
## PoliticalView_factorSlightly Conservative                       0.1651
## PoliticalView_factorVery Conservative                           0.2202
## PoliticalView_factorNeither Conservative nor Liberal            0.0826
## Community_factorSuburban                                        0.4220
## Community_factorRural                                           0.1468
##                                                        Means Control
## distance                                                       0.4434
## Age_factorLess than 25 years                                   0.0183
## Age_factor25-34 years                                          0.5413
## Age_factor35-44 years                                          0.2385
## Age_factor45-54 years                                          0.1009
## Age_factor55 years or older                                    0.1009
## Education_factor.L                                             0.1058
## Education_factor.Q                                            -0.2392
## Education_factor.C                                            -0.1873
## Education_factor^4                                            -0.0843
## Education_factor^5                                             0.1512
## Education_factor^6                                             0.2442
## Gender_factorMale                                              0.6147
## Gender_factorFemale                                            0.3670
## Gender_factorOther                                             0.0000
## LivingAreaAffected_factor.L                                   -0.0843
## ClimateChangeAwareness_factor.L                                0.4476
## ClimateChangeAwareness_factor.Q                               -0.0412
## PreTreatment_factor.L                                          0.3695
## PreTreatment_factor.Q                                          0.1191
## PreTreatment_factor.C                                          0.0116
```

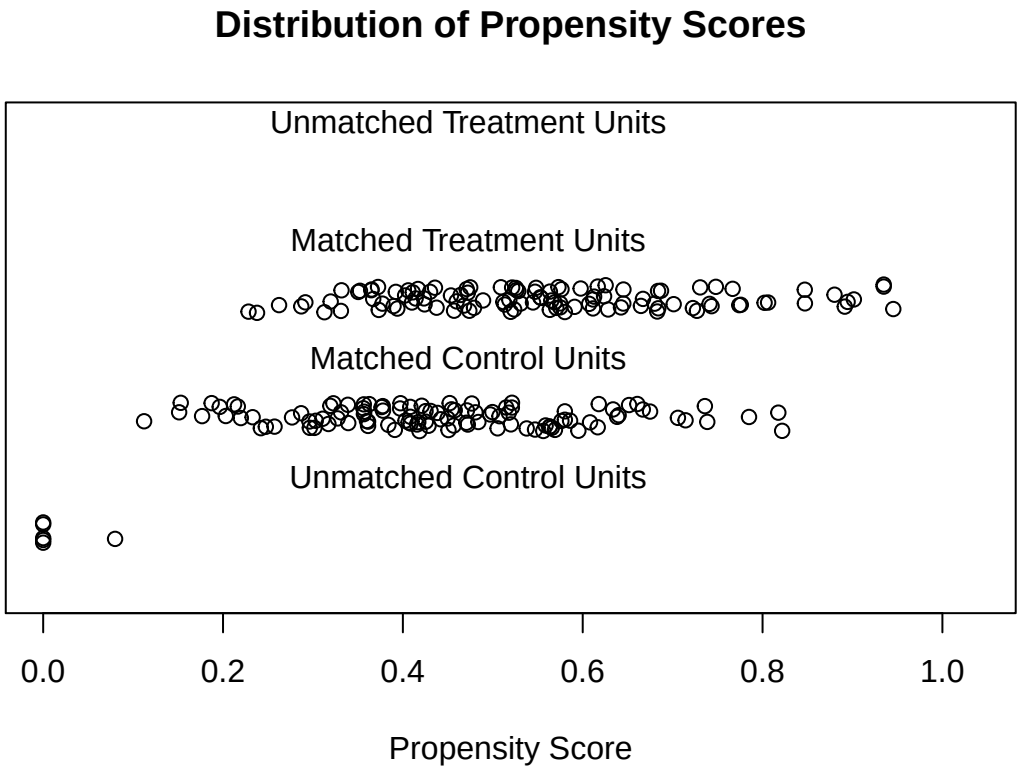
```
## PreTreatment_factor^4                                        -0.0364
## PreTreatment_factor^5                                        -0.0064
## Income_factor.L                                              -0.3278
## Income_factor.Q                                              -0.0172
## Income_factor.C                                               0.0609
## Income_factor^4                                              -0.0230
## PoliticalView_factorSlightly Liberal                          0.3028
## PoliticalView_factorSlightly Conservative                     0.2752
## PoliticalView_factorVery Conservative                         0.2018
## PoliticalView_factorNeither Conservative nor Liberal          0.0642
## Community_factorSuburban                                      0.4037
## Community_factorRural                                         0.1284
##                                                    SD Control Mean Diff
## distance                                                 0.1536    0.1124
## Age_factorLess than 25 years                             0.1348    0.0826
## Age_factor25-34 years                                    0.5006   -0.0917
## Age_factor35-44 years                                    0.4282   -0.0550
## Age_factor45-54 years                                    0.3026    0.0367
## Age_factor55 years or older                              0.3026    0.0275
## Education_factor.L                                       0.2321    0.0087
## Education_factor.Q                                       0.1532   -0.0070
## Education_factor.C                                       0.3537   -0.0225
## Education_factor^4                                       0.3152    0.0207
## Education_factor^5                                       0.4825    0.0390
## Education_factor^6                                       0.3683   -0.0359
## Gender_factorMale                                        0.4889    0.0275
## Gender_factorFemale                                      0.4842   -0.0275
## Gender_factorOther                                       0.0000    0.0000
## LivingAreaAffected_factor.L                              0.7053    0.0649
## ClimateChangeAwareness_factor.L                          0.3424    0.0908
## ClimateChangeAwareness_factor.Q                          0.5930    0.1573
## PreTreatment_factor.L                                    0.2690    0.0526
## PreTreatment_factor.Q                                    0.4046    0.0811
## PreTreatment_factor.C                                    0.4204    0.0431
## PreTreatment_factor^4                                    0.3963    0.0087
## PreTreatment_factor^5                                    0.3428   -0.0260
## Income_factor.L                                          0.2948   -0.0029
## Income_factor.Q                                          0.4414    0.0466
## Income_factor.C                                          0.4564   -0.0522
## Income_factor^4                                          0.4521   -0.0548
## PoliticalView_factorSlightly Liberal                     0.4616    0.0367
## PoliticalView_factorSlightly Conservative                0.4487   -0.1101
## PoliticalView_factorVery Conservative                    0.4032    0.0183
## PoliticalView_factorNeither Conservative nor Liberal     0.2463    0.0183
## Community_factorSuburban                                 0.4929    0.0183
## Community_factorRural                                    0.3361    0.0183
##                                                    eQQ Med eQQ Mean
## distance                                            0.1102   0.1124
## Age_factorLess than 25 years                        0.0000   0.0826
## Age_factor25-34 years                               0.0000   0.0917
## Age_factor35-44 years                               0.0000   0.0550
## Age_factor45-54 years                               0.0000   0.0367
## Age_factor55 years or older                         0.0000   0.0275
## Education_factor.L                                  0.0000   0.0121
```

```
## Education_factor.Q                                    0.0000   0.0070
## Education_factor.C                                    0.0000   0.0225
## Education_factor^4                                    0.0000   0.0207
## Education_factor^5                                    0.0000   0.0390
## Education_factor^6                                    0.0000   0.0359
## Gender_factorMale                                     0.0000   0.0275
## Gender_factorFemale                                   0.0000   0.0275
## Gender_factorOther                                    0.0000   0.0000
## LivingAreaAffected_factor.L                           0.0000   0.0649
## ClimateChangeAwareness_factor.L                       0.0000   0.0908
## ClimateChangeAwareness_factor.Q                       0.0000   0.1573
## PreTreatment_factor.L                                 0.0000   0.0526
## PreTreatment_factor.Q                                 0.0000   0.0811
## PreTreatment_factor.C                                 0.0000   0.0486
## PreTreatment_factor^4                                 0.0000   0.0329
## PreTreatment_factor^5                                 0.0000   0.0457
## Income_factor.L                                       0.0000   0.0319
## Income_factor.Q                                       0.0000   0.0466
## Income_factor.C                                       0.0000   0.0522
## Income_factor^4                                       0.0000   0.0548
## PoliticalView_factorSlightly Liberal                  0.0000   0.0367
## PoliticalView_factorSlightly Conservative             0.0000   0.1101
## PoliticalView_factorVery Conservative                 0.0000   0.0183
## PoliticalView_factorNeither Conservative nor Liberal  0.0000   0.0183
## Community_factorSuburban                              0.0000   0.0183
## Community_factorRural                                 0.0000   0.0183
##                                                      eQQ Max
## distance                                              0.1801
## Age_factorLess than 25 years                          1.0000
## Age_factor25-34 years                                 1.0000
## Age_factor35-44 years                                 1.0000
## Age_factor45-54 years                                 1.0000
## Age_factor55 years or older                           1.0000
## Education_factor.L                                    0.1890
## Education_factor.Q                                    0.3273
## Education_factor.C                                    0.4082
## Education_factor^4                                    0.6447
## Education_factor^5                                    0.4364
## Education_factor^6                                    0.6908
## Gender_factorMale                                     1.0000
## Gender_factorFemale                                   1.0000
## Gender_factorOther                                    0.0000
## LivingAreaAffected_factor.L                           1.4142
## ClimateChangeAwareness_factor.L                       0.7071
## ClimateChangeAwareness_factor.Q                       1.2247
## PreTreatment_factor.L                                 0.2390
## PreTreatment_factor.Q                                 0.6547
## PreTreatment_factor.C                                 0.6708
## PreTreatment_factor^4                                 0.7559
## PreTreatment_factor^5                                 0.5669
## Income_factor.L                                       0.3162
## Income_factor.Q                                       0.8018
## Income_factor.C                                       0.6325
## Income_factor^4                                       0.5976
```

```
## PoliticalView_factorSlightly Liberal                   1.0000
## PoliticalView_factorSlightly Conservative              1.0000
## PoliticalView_factorVery Conservative                  1.0000
## PoliticalView_factorNeither Conservative nor Liberal   1.0000
## Community_factorSuburban                               1.0000
## Community_factorRural                                  1.0000
##
## Percent Balance Improvement:
##                                                    Mean Diff. eQQ Med
## distance                                              16.6431 11.0342
## Age_factorLess than 25 years                           1.1461  0.0000
## Age_factor25-34 years                                -27.0718  0.0000
## Age_factor35-44 years                                 19.8606  0.0000
## Age_factor45-54 years                                -10.3118  0.0000
## Age_factor55 years or older                          -14.2384  0.0000
## Education_factor.L                                     6.3518  0.0000
## Education_factor.Q                                    73.1845  0.0000
## Education_factor.C                                    10.6218  0.0000
## Education_factor^4                                    20.7287  0.0000
## Education_factor^5                                    15.0890  0.0000
## Education_factor^6                                   -56.9021  0.0000
## Gender_factorMale                                     34.7826  0.0000
## Gender_factorFemale                                   20.1389  0.0000
## Gender_factorOther                                   100.0000  0.0000
## LivingAreaAffected_factor.L                           10.8527  0.0000
## ClimateChangeAwareness_factor.L                       10.8527  0.0000
## ClimateChangeAwareness_factor.Q                       -1.3854  0.0000
## PreTreatment_factor.L                                 11.4533  0.0000
## PreTreatment_factor.Q                                 -6.8111  0.0000
## PreTreatment_factor.C                                -46.3932  0.0000
## PreTreatment_factor^4                                 47.8694  0.0000
## PreTreatment_factor^5                                 15.3443  0.0000
## Income_factor.L                                       83.1871  0.0000
## Income_factor.Q                                        2.9751  0.0000
## Income_factor.C                                        4.2553  0.0000
## Income_factor^4                                       -5.6985  0.0000
## PoliticalView_factorSlightly Liberal                  -4.5455  0.0000
## PoliticalView_factorSlightly Conservative             -5.4240  0.0000
## PoliticalView_factorVery Conservative                  9.0909  0.0000
## PoliticalView_factorNeither Conservative nor Liberal  -41.1043  0.0000
## Community_factorSuburban                              -37.7246  0.0000
## Community_factorRural                                 -12.1951  0.0000
##                                                    eQQ Mean  eQQ Max
## distance                                            18.7372  38.2166
## Age_factorLess than 25 years                        10.0000   0.0000
## Age_factor25-34 years                              -42.8571   0.0000
## Age_factor35-44 years                               14.2857   0.0000
## Age_factor45-54 years                                0.0000   0.0000
## Age_factor55 years or older                          0.0000   0.0000
## Education_factor.L                                  50.0000   0.0000
## Education_factor.Q                                  66.6667  40.0000
## Education_factor.C                                   0.0000   0.0000
## Education_factor^4                                  37.7778   0.0000
## Education_factor^5                                  20.4082   0.0000
```

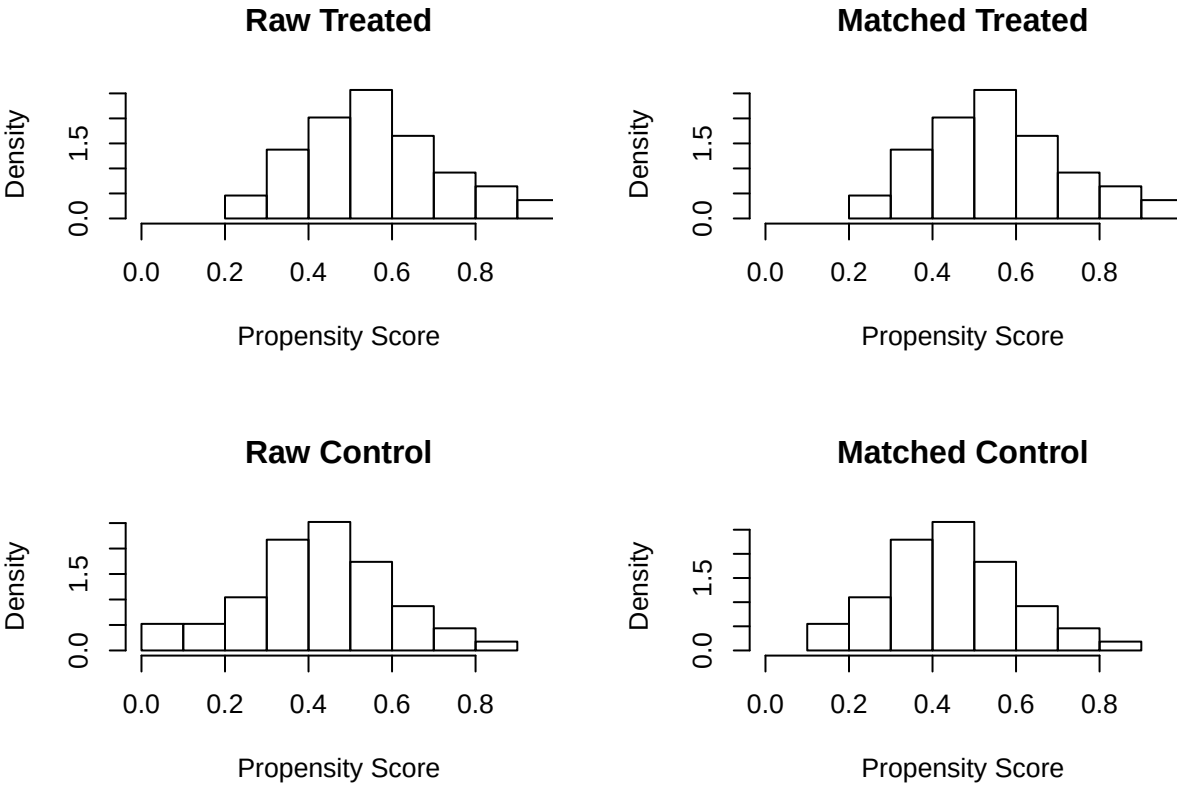
```
## Education_factor^6                                    -70.0000 -50.0000
## Gender_factorMale                                      40.0000   0.0000
## Gender_factorFemale                                     0.0000   0.0000
## Gender_factorOther                                    100.0000 100.0000
## LivingAreaAffected_factor.L                            16.6667   0.0000
## ClimateChangeAwareness_factor.L                        12.5000   0.0000
## ClimateChangeAwareness_factor.Q                         0.0000   0.0000
## PreTreatment_factor.L                                  17.2414   0.0000
## PreTreatment_factor.Q                                  -3.8462   0.0000
## PreTreatment_factor.C                                 -10.9375 -12.5000
## PreTreatment_factor^4                                   9.5238   0.0000
## PreTreatment_factor^5                                 -16.1765   0.0000
## Income_factor.L                                        15.3846   0.0000
## Income_factor.Q                                        13.6364   0.0000
## Income_factor.C                                       -12.5000   0.0000
## Income_factor^4                                       -25.0000   0.0000
## PoliticalView_factorSlightly Liberal                    0.0000   0.0000
## PoliticalView_factorSlightly Conservative              -9.0909   0.0000
## PoliticalView_factorVery Conservative                  33.3333   0.0000
## PoliticalView_factorNeither Conservative nor Liberal    0.0000   0.0000
## Community_factorSuburban                                0.0000   0.0000
## Community_factorRural                                   0.0000   0.0000
##
## Sample sizes:
##           Control Treated
## All           115     109
## Matched       109     109
## Unmatched       6       0
## Discarded       0       0
```

```
plot(m.out, type = "jitter")
```




```
## [1] "To identify the units, use first mouse button; to stop, use second."
## integer(0)
```

```
plot(m.out, type = "hist")
```



```r
m.out = matchit(treat_dummy ~ Age_factor + Education_factor + Gender_factor +
                LivingAreaAffected_factor + ClimateChangeAwareness_factor +
                PreTreatment_factor + Income_factor + PoliticalView_factor +
                Community_factor,
                data = d_antitreatment_exp, method = "nearest",
                ratio = 1)
```

```
## Warning in matchit2nearest(c(`1` = 0, `2` = 0, `3` = 1, `4` = 0, `5` = 1, :
## Fewer control than treated units and matching without replacement. Not all
## treated units will receive a match. Treated units will be matched in the
## order specified by m.order: largest
```

```r
summary(m.out)
```

```
##
## Call:
## matchit(formula = treat_dummy ~ Age_factor + Education_factor +
##     Gender_factor + LivingAreaAffected_factor + ClimateChangeAwareness_factor +
##     PreTreatment_factor + Income_factor + PoliticalView_factor +
##     Community_factor, data = d_antitreatment_exp, method = "nearest",
##     ratio = 1)
##
## Summary of balance for all data:
##                                                  Means Treated
## distance                                                0.5770
## Age_factorLess than 25 years                            0.0667
## Age_factor25-34 years                                   0.5000
## Age_factor35-44 years                                   0.2000
## Age_factor45-54 years                                   0.1000
## Age_factor55 years or older                             0.1333
## Education_factor.L                                      0.1008
## Education_factor.Q                                     -0.2546
## Education_factor.C                                     -0.1633
## Education_factor^4                                     -0.0282
## Education_factor^5                                      0.1255
## Education_factor^6                                      0.2133
## Gender_factorMale                                       0.7000
## Gender_factorFemale                                     0.2917
## Gender_factorOther                                      0.0083
## LivingAreaAffected_factor.L                            -0.1061
## ClimateChangeAwareness_factor.L                         0.4360
## ClimateChangeAwareness_factor.Q                        -0.0408
## PreTreatment_factor.L                                   0.3367
## PreTreatment_factor.Q                                   0.0900
## PreTreatment_factor.C                                   0.0019
## PreTreatment_factor^4                                  -0.1055
## PreTreatment_factor^5                                  -0.0961
## Income_factor.L                                        -0.2951
## Income_factor.Q                                         0.0267
## Income_factor.C                                         0.0632
## Income_factor^4                                        -0.0498
## PoliticalView_factorSlightly Liberal                    0.2917
## PoliticalView_factorSlightly Conservative               0.1500
## PoliticalView_factorVery Conservative                   0.2667
```

```
## PoliticalView_factorNeither Conservative nor Liberal        0.0833
## Community_factorSuburban                                    0.4250
## Community_factorRural                                       0.1750
##                                                      Means Control
## distance                                                    0.4414
## Age_factorLess than 25 years                                0.0174
## Age_factor25-34 years                                       0.5217
## Age_factor35-44 years                                       0.2522
## Age_factor45-54 years                                       0.1043
## Age_factor55 years or older                                 0.1043
## Education_factor.L                                          0.1052
## Education_factor.Q                                         -0.2201
## Education_factor.C                                         -0.1846
## Education_factor^4                                         -0.0897
## Education_factor^5                                          0.1442
## Education_factor^6                                          0.2311
## Gender_factorMale                                           0.6000
## Gender_factorFemale                                         0.3739
## Gender_factorOther                                          0.0087
## LivingAreaAffected_factor.L                                -0.0922
## ClimateChangeAwareness_factor.L                             0.4366
## ClimateChangeAwareness_factor.Q                            -0.0390
## PreTreatment_factor.L                                       0.3627
## PreTreatment_factor.Q                                       0.1243
## PreTreatment_factor.C                                       0.0253
## PreTreatment_factor^4                                      -0.0444
## PreTreatment_factor^5                                      -0.0016
## Income_factor.L                                            -0.3135
## Income_factor.Q                                            -0.0186
## Income_factor.C                                             0.0632
## Income_factor^4                                            -0.0260
## PoliticalView_factorSlightly Liberal                        0.3043
## PoliticalView_factorSlightly Conservative                   0.2696
## PoliticalView_factorVery Conservative                       0.2000
## PoliticalView_factorNeither Conservative nor Liberal        0.0696
## Community_factorSuburban                                    0.4087
## Community_factorRural                                       0.1304
##                                                    SD Control Mean Diff
## distance                                               0.1687    0.1356
## Age_factorLess than 25 years                           0.1313    0.0493
## Age_factor25-34 years                                  0.5017   -0.0217
## Age_factor35-44 years                                  0.4362   -0.0522
## Age_factor45-54 years                                  0.3070   -0.0043
## Age_factor55 years or older                            0.3070    0.0290
## Education_factor.L                                     0.2455   -0.0044
## Education_factor.Q                                     0.1851   -0.0345
## Education_factor.C                                     0.3556    0.0213
## Education_factor^4                                     0.3198    0.0615
## Education_factor^5                                     0.4788   -0.0187
## Education_factor^6                                     0.3671   -0.0179
## Gender_factorMale                                      0.4920    0.1000
## Gender_factorFemale                                    0.4860   -0.0822
## Gender_factorOther                                     0.0933   -0.0004
## LivingAreaAffected_factor.L                            0.7041   -0.0138
```

```
## ClimateChangeAwareness_factor.L                          0.3577   -0.0005
## ClimateChangeAwareness_factor.Q                          0.5923   -0.0018
## PreTreatment_factor.L                                    0.2814   -0.0261
## PreTreatment_factor.Q                                    0.4015   -0.0343
## PreTreatment_factor.C                                    0.4216   -0.0234
## PreTreatment_factor^4                                    0.3968   -0.0611
## PreTreatment_factor^5                                    0.3377   -0.0944
## Income_factor.L                                          0.3092    0.0183
## Income_factor.Q                                          0.4403    0.0453
## Income_factor.C                                          0.4573    0.0000
## Income_factor^4                                          0.4519   -0.0238
## PoliticalView_factorSlightly Liberal                     0.4621   -0.0127
## PoliticalView_factorSlightly Conservative                0.4457   -0.1196
## PoliticalView_factorVery Conservative                    0.4018    0.0667
## PoliticalView_factorNeither Conservative nor Liberal     0.2555    0.0138
## Community_factorSuburban                                 0.4937    0.0163
## Community_factorRural                                    0.3383    0.0446
##                                                       eQQ Med eQQ Mean
## distance                                               0.1341   0.1323
## Age_factorLess than 25 years                           0.0000   0.0435
## Age_factor25-34 years                                  0.0000   0.0261
## Age_factor35-44 years                                  0.0000   0.0522
## Age_factor45-54 years                                  0.0000   0.0087
## Age_factor55 years or older                            0.0000   0.0261
## Education_factor.L                                     0.0000   0.0263
## Education_factor.Q                                     0.0000   0.0370
## Education_factor.C                                     0.0000   0.0248
## Education_factor^4                                     0.0000   0.0589
## Education_factor^5                                     0.0000   0.0256
## Education_factor^6                                     0.0000   0.0320
## Gender_factorMale                                      0.0000   0.0957
## Gender_factorFemale                                    0.0000   0.0870
## Gender_factorOther                                     0.0000   0.0000
## LivingAreaAffected_factor.L                            0.0000   0.0246
## ClimateChangeAwareness_factor.L                        0.0000   0.0061
## ClimateChangeAwareness_factor.Q                        0.0000   0.0106
## PreTreatment_factor.L                                  0.0000   0.0333
## PreTreatment_factor.Q                                  0.0000   0.0427
## PreTreatment_factor.C                                  0.0000   0.0272
## PreTreatment_factor^4                                  0.0000   0.0624
## PreTreatment_factor^5                                  0.0000   0.0997
## Income_factor.L                                        0.0000   0.0275
## Income_factor.Q                                        0.0000   0.0372
## Income_factor.C                                        0.0000   0.0192
## Income_factor^4                                        0.0000   0.0260
## PoliticalView_factorSlightly Liberal                   0.0000   0.0174
## PoliticalView_factorSlightly Conservative              0.0000   0.1217
## PoliticalView_factorVery Conservative                  0.0000   0.0609
## PoliticalView_factorNeither Conservative nor Liberal   0.0000   0.0087
## Community_factorSuburban                               0.0000   0.0087
## Community_factorRural                                  0.0000   0.0435
##                                                       eQQ Max
## distance                                               0.2140
## Age_factorLess than 25 years                           1.0000
```

```
## Age_factor25-34 years                                    1.0000
## Age_factor35-44 years                                    1.0000
## Age_factor45-54 years                                    1.0000
## Age_factor55 years or older                              1.0000
## Education_factor.L                                       0.1890
## Education_factor.Q                                       0.5455
## Education_factor.C                                       0.4082
## Education_factor^4                                       0.6447
## Education_factor^5                                       0.4364
## Education_factor^6                                       0.4606
## Gender_factorMale                                        1.0000
## Gender_factorFemale                                      1.0000
## Gender_factorOther                                       0.0000
## LivingAreaAffected_factor.L                              1.4142
## ClimateChangeAwareness_factor.L                          0.7071
## ClimateChangeAwareness_factor.Q                          1.2247
## PreTreatment_factor.L                                    0.2390
## PreTreatment_factor.Q                                    0.6547
## PreTreatment_factor.C                                    0.5963
## PreTreatment_factor^4                                    0.7559
## PreTreatment_factor^5                                    0.3780
## Income_factor.L                                          0.3162
## Income_factor.Q                                          0.8018
## Income_factor.C                                          0.3162
## Income_factor^4                                          0.5976
## PoliticalView_factorSlightly Liberal                     1.0000
## PoliticalView_factorSlightly Conservative                1.0000
## PoliticalView_factorVery Conservative                    1.0000
## PoliticalView_factorNeither Conservative nor Liberal     1.0000
## Community_factorSuburban                                 1.0000
## Community_factorRural                                    1.0000
##
##
## Summary of balance for matched data:
##                                                    Means Treated
## distance                                                  0.5926
## Age_factorLess than 25 years                              0.0696
## Age_factor25-34 years                                     0.4957
## Age_factor35-44 years                                     0.1913
## Age_factor45-54 years                                     0.1043
## Age_factor55 years or older                               0.1391
## Education_factor.L                                        0.1085
## Education_factor.Q                                       -0.2600
## Education_factor.C                                       -0.1739
## Education_factor^4                                       -0.0161
## Education_factor^5                                        0.1271
## Education_factor^6                                        0.2191
## Gender_factorMale                                         0.7043
## Gender_factorFemale                                       0.2870
## Gender_factorOther                                        0.0087
## LivingAreaAffected_factor.L                              -0.1291
## ClimateChangeAwareness_factor.L                           0.4366
## ClimateChangeAwareness_factor.Q                          -0.0390
## PreTreatment_factor.L                                     0.3378
```

```
## PreTreatment_factor.Q                                      0.0958
## PreTreatment_factor.C                                      0.0032
## PreTreatment_factor^4                                     -0.1232
## PreTreatment_factor^5                                     -0.1178
## Income_factor.L                                           -0.2915
## Income_factor.Q                                            0.0279
## Income_factor.C                                            0.0605
## Income_factor^4                                           -0.0520
## PoliticalView_factorSlightly Liberal                       0.2957
## PoliticalView_factorSlightly Conservative                  0.1304
## PoliticalView_factorVery Conservative                      0.2696
## PoliticalView_factorNeither Conservative nor Liberal       0.0870
## Community_factorSuburban                                   0.4174
## Community_factorRural                                      0.1826
##                                                    Means Control
## distance                                                   0.4414
## Age_factorLess than 25 years                               0.0174
## Age_factor25-34 years                                      0.5217
## Age_factor35-44 years                                      0.2522
## Age_factor45-54 years                                      0.1043
## Age_factor55 years or older                                0.1043
## Education_factor.L                                         0.1052
## Education_factor.Q                                        -0.2201
## Education_factor.C                                        -0.1846
## Education_factor^4                                        -0.0897
## Education_factor^5                                         0.1442
## Education_factor^6                                         0.2311
## Gender_factorMale                                          0.6000
## Gender_factorFemale                                        0.3739
## Gender_factorOther                                         0.0087
## LivingAreaAffected_factor.L                               -0.0922
## ClimateChangeAwareness_factor.L                            0.4366
## ClimateChangeAwareness_factor.Q                           -0.0390
## PreTreatment_factor.L                                      0.3627
## PreTreatment_factor.Q                                      0.1243
## PreTreatment_factor.C                                      0.0253
## PreTreatment_factor^4                                     -0.0444
## PreTreatment_factor^5                                     -0.0016
## Income_factor.L                                           -0.3135
## Income_factor.Q                                           -0.0186
## Income_factor.C                                            0.0632
## Income_factor^4                                           -0.0260
## PoliticalView_factorSlightly Liberal                       0.3043
## PoliticalView_factorSlightly Conservative                  0.2696
## PoliticalView_factorVery Conservative                      0.2000
## PoliticalView_factorNeither Conservative nor Liberal       0.0696
## Community_factorSuburban                                   0.4087
## Community_factorRural                                      0.1304
##                                                  SD Control Mean Diff
## distance                                             0.1687    0.1511
## Age_factorLess than 25 years                         0.1313    0.0522
## Age_factor25-34 years                                0.5017   -0.0261
## Age_factor35-44 years                                0.4362   -0.0609
## Age_factor45-54 years                                0.3070    0.0000
```

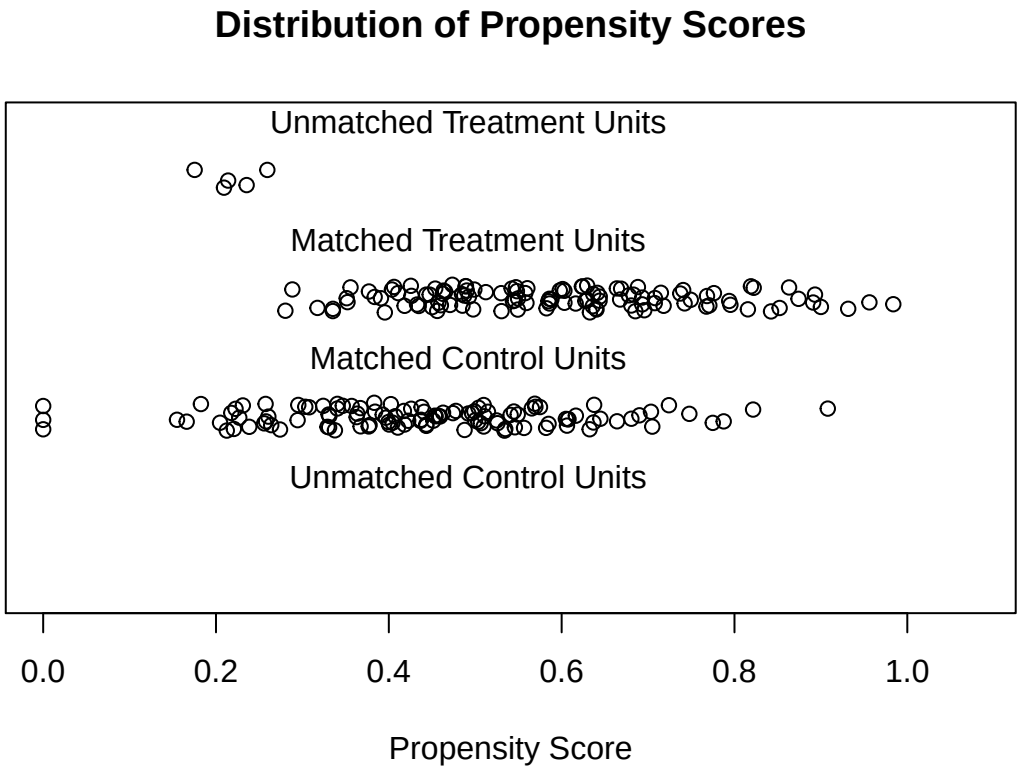
```
## Age_factor55 years or older                                0.3070    0.0348
## Education_factor.L                                         0.2455    0.0033
## Education_factor.Q                                         0.1851   -0.0398
## Education_factor.C                                         0.3556    0.0106
## Education_factor^4                                         0.3198    0.0736
## Education_factor^5                                         0.4788   -0.0171
## Education_factor^6                                         0.3671   -0.0120
## Gender_factorMale                                          0.4920    0.1043
## Gender_factorFemale                                        0.4860   -0.0870
## Gender_factorOther                                         0.0933    0.0000
## LivingAreaAffected_factor.L                                0.7041   -0.0369
## ClimateChangeAwareness_factor.L                            0.3577    0.0000
## ClimateChangeAwareness_factor.Q                            0.5923    0.0000
## PreTreatment_factor.L                                      0.2814   -0.0249
## PreTreatment_factor.Q                                      0.4015   -0.0285
## PreTreatment_factor.C                                      0.4216   -0.0220
## PreTreatment_factor^4                                      0.3968   -0.0789
## PreTreatment_factor^5                                      0.3377   -0.1161
## Income_factor.L                                            0.3092    0.0220
## Income_factor.Q                                            0.4403    0.0465
## Income_factor.C                                            0.4573   -0.0027
## Income_factor^4                                            0.4519   -0.0260
## PoliticalView_factorSlightly Liberal                       0.4621   -0.0087
## PoliticalView_factorSlightly Conservative                  0.4457   -0.1391
## PoliticalView_factorVery Conservative                      0.4018    0.0696
## PoliticalView_factorNeither Conservative nor Liberal       0.2555    0.0174
## Community_factorSuburban                                   0.4937    0.0087
## Community_factorRural                                      0.3383    0.0522
##                                                       eQQ Med eQQ Mean
## distance                                               0.1475   0.1511
## Age_factorLess than 25 years                           0.0000   0.0522
## Age_factor25-34 years                                  0.0000   0.0261
## Age_factor35-44 years                                  0.0000   0.0609
## Age_factor45-54 years                                  0.0000   0.0000
## Age_factor55 years or older                            0.0000   0.0348
## Education_factor.L                                     0.0000   0.0296
## Education_factor.Q                                     0.0000   0.0398
## Education_factor.C                                     0.0000   0.0248
## Education_factor^4                                     0.0000   0.0736
## Education_factor^5                                     0.0000   0.0266
## Education_factor^6                                     0.0000   0.0441
## Gender_factorMale                                      0.0000   0.1043
## Gender_factorFemale                                    0.0000   0.0870
## Gender_factorOther                                     0.0000   0.0000
## LivingAreaAffected_factor.L                            0.0000   0.0369
## ClimateChangeAwareness_factor.L                        0.0000   0.0000
## ClimateChangeAwareness_factor.Q                        0.0000   0.0000
## PreTreatment_factor.L                                  0.0000   0.0374
## PreTreatment_factor.Q                                  0.0000   0.0512
## PreTreatment_factor.C                                  0.0000   0.0246
## PreTreatment_factor^4                                  0.0000   0.0789
## PreTreatment_factor^5                                  0.0000   0.1161
## Income_factor.L                                        0.0000   0.0275
## Income_factor.Q                                        0.0000   0.0465
```

```
## Income_factor.C                                          0.0000   0.0192
## Income_factor^4                                          0.0000   0.0260
## PoliticalView_factorSlightly Liberal                     0.0000   0.0087
## PoliticalView_factorSlightly Conservative                0.0000   0.1391
## PoliticalView_factorVery Conservative                    0.0000   0.0696
## PoliticalView_factorNeither Conservative nor Liberal     0.0000   0.0174
## Community_factorSuburban                                 0.0000   0.0087
## Community_factorRural                                    0.0000   0.0522
##                                                        eQQ Max
## distance                                                0.3174
## Age_factorLess than 25 years                            1.0000
## Age_factor25-34 years                                   1.0000
## Age_factor35-44 years                                   1.0000
## Age_factor45-54 years                                   0.0000
## Age_factor55 years or older                             1.0000
## Education_factor.L                                      0.1890
## Education_factor.Q                                      0.5455
## Education_factor.C                                      0.4082
## Education_factor^4                                      0.6447
## Education_factor^5                                      0.4364
## Education_factor^6                                      0.6908
## Gender_factorMale                                       1.0000
## Gender_factorFemale                                     1.0000
## Gender_factorOther                                      0.0000
## LivingAreaAffected_factor.L                             1.4142
## ClimateChangeAwareness_factor.L                         0.0000
## ClimateChangeAwareness_factor.Q                         0.0000
## PreTreatment_factor.L                                   0.2390
## PreTreatment_factor.Q                                   0.6547
## PreTreatment_factor.C                                   0.2236
## PreTreatment_factor^4                                   0.7559
## PreTreatment_factor^5                                   0.5669
## Income_factor.L                                         0.3162
## Income_factor.Q                                         0.8018
## Income_factor.C                                         0.3162
## Income_factor^4                                         0.5976
## PoliticalView_factorSlightly Liberal                    1.0000
## PoliticalView_factorSlightly Conservative               1.0000
## PoliticalView_factorVery Conservative                   1.0000
## PoliticalView_factorNeither Conservative nor Liberal    1.0000
## Community_factorSuburban                                1.0000
## Community_factorRural                                   1.0000
##
## Percent Balance Improvement:
##                                                        Mean Diff.
## distance                                                -11.4916
## Age_factorLess than 25 years                             -5.8824
## Age_factor25-34 years                                   -20.0000
## Age_factor35-44 years                                   -16.6667
## Age_factor45-54 years                                   100.0000
## Age_factor55 years or older                             -20.0000
## Education_factor.L                                       25.0000
## Education_factor.Q                                      -15.5963
## Education_factor.C                                       50.0000
```

```
## Education_factor^4                                                  -19.6581
## Education_factor^5                                                    8.8608
## Education_factor^6                                                   32.7103
## Gender_factorMale                                                    -4.3478
## Gender_factorFemale                                                  -5.7269
## Gender_factorOther                                                  100.0000
## LivingAreaAffected_factor.L                                        -166.6667
## ClimateChangeAwareness_factor.L                                     100.0000
## ClimateChangeAwareness_factor.Q                                     100.0000
## PreTreatment_factor.L                                                4.3189
## PreTreatment_factor.Q                                               16.9550
## PreTreatment_factor.C                                                5.8824
## PreTreatment_factor^4                                              -29.0034
## PreTreatment_factor^5                                              -22.9877
## Income_factor.L                                                    -20.0000
## Income_factor.Q                                                     -2.5641
## Income_factor.C                                -19814445206227752.0000
## Income_factor^4                                                     -9.0909
## PoliticalView_factorSlightly Liberal                                31.4286
## PoliticalView_factorSlightly Conservative                          -16.3636
## PoliticalView_factorVery Conservative                               -4.3478
## PoliticalView_factorNeither Conservative nor Liberal               -26.3158
## Community_factorSuburban                                            46.6667
## Community_factorRural                                              -17.0732
##                                                    eQQ Med  eQQ Mean
## distance                                          -10.0421  -14.2486
## Age_factorLess than 25 years                        0.0000  -20.0000
## Age_factor25-34 years                               0.0000    0.0000
## Age_factor35-44 years                               0.0000  -16.6667
## Age_factor45-54 years                               0.0000  100.0000
## Age_factor55 years or older                         0.0000  -33.3333
## Education_factor.L                                  0.0000  -12.5000
## Education_factor.Q                                  0.0000   -7.6923
## Education_factor.C                                  0.0000    0.0000
## Education_factor^4                                  0.0000  -25.0000
## Education_factor^5                                  0.0000   -3.7037
## Education_factor^6                                  0.0000  -37.5000
## Gender_factorMale                                   0.0000   -9.0909
## Gender_factorFemale                                 0.0000    0.0000
## Gender_factorOther                                  0.0000    0.0000
## LivingAreaAffected_factor.L                         0.0000  -50.0000
## ClimateChangeAwareness_factor.L                     0.0000  100.0000
## ClimateChangeAwareness_factor.Q                     0.0000  100.0000
## PreTreatment_factor.L                               0.0000  -12.5000
## PreTreatment_factor.Q                               0.0000  -20.0000
## PreTreatment_factor.C                               0.0000    9.5238
## PreTreatment_factor^4                               0.0000  -26.3158
## PreTreatment_factor^5                               0.0000  -16.4835
## Income_factor.L                                     0.0000    0.0000
## Income_factor.Q                                     0.0000  -25.0000
## Income_factor.C                                     0.0000    0.0000
## Income_factor^4                                     0.0000    0.0000
## PoliticalView_factorSlightly Liberal                0.0000   50.0000
## PoliticalView_factorSlightly Conservative           0.0000  -14.2857
```

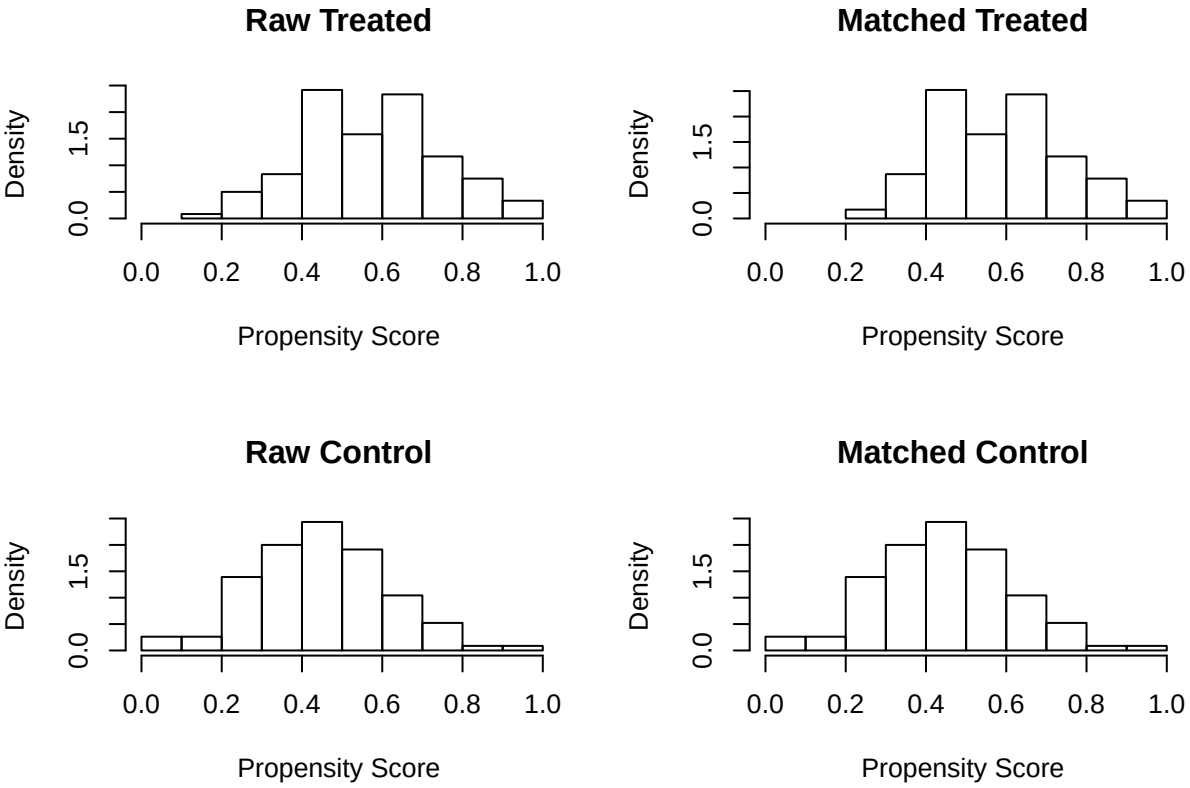
```
## PoliticalView_factorVery Conservative                  0.0000  -14.2857
## PoliticalView_factorNeither Conservative nor Liberal   0.0000 -100.0000
## Community_factorSuburban                               0.0000    0.0000
## Community_factorRural                                  0.0000  -20.0000
##                                                         eQQ Max
## distance                                              -48.3174
## Age_factorLess than 25 years                            0.0000
## Age_factor25-34 years                                   0.0000
## Age_factor35-44 years                                   0.0000
## Age_factor45-54 years                                 100.0000
## Age_factor55 years or older                             0.0000
## Education_factor.L                                      0.0000
## Education_factor.Q                                      0.0000
## Education_factor.C                                      0.0000
## Education_factor^4                                      0.0000
## Education_factor^5                                      0.0000
## Education_factor^6                                    -50.0000
## Gender_factorMale                                       0.0000
## Gender_factorFemale                                     0.0000
## Gender_factorOther                                      0.0000
## LivingAreaAffected_factor.L                             0.0000
## ClimateChangeAwareness_factor.L                       100.0000
## ClimateChangeAwareness_factor.Q                       100.0000
## PreTreatment_factor.L                                   0.0000
## PreTreatment_factor.Q                                   0.0000
## PreTreatment_factor.C                                  62.5000
## PreTreatment_factor^4                                   0.0000
## PreTreatment_factor^5                                 -50.0000
## Income_factor.L                                         0.0000
## Income_factor.Q                                         0.0000
## Income_factor.C                                         0.0000
## Income_factor^4                                         0.0000
## PoliticalView_factorSlightly Liberal                    0.0000
## PoliticalView_factorSlightly Conservative               0.0000
## PoliticalView_factorVery Conservative                   0.0000
## PoliticalView_factorNeither Conservative nor Liberal    0.0000
## Community_factorSuburban                                0.0000
## Community_factorRural                                   0.0000
##
## Sample sizes:
##           Control Treated
## All           115     120
## Matched       115     115
## Unmatched       0       5
## Discarded       0       0
```

```
plot(m.out, type = "jitter")
```




```
## [1] "To identify the units, use first mouse button; to stop, use second."
## integer(0)
```

```
plot(m.out, type = "hist")
```



#Check if there is differential attrition

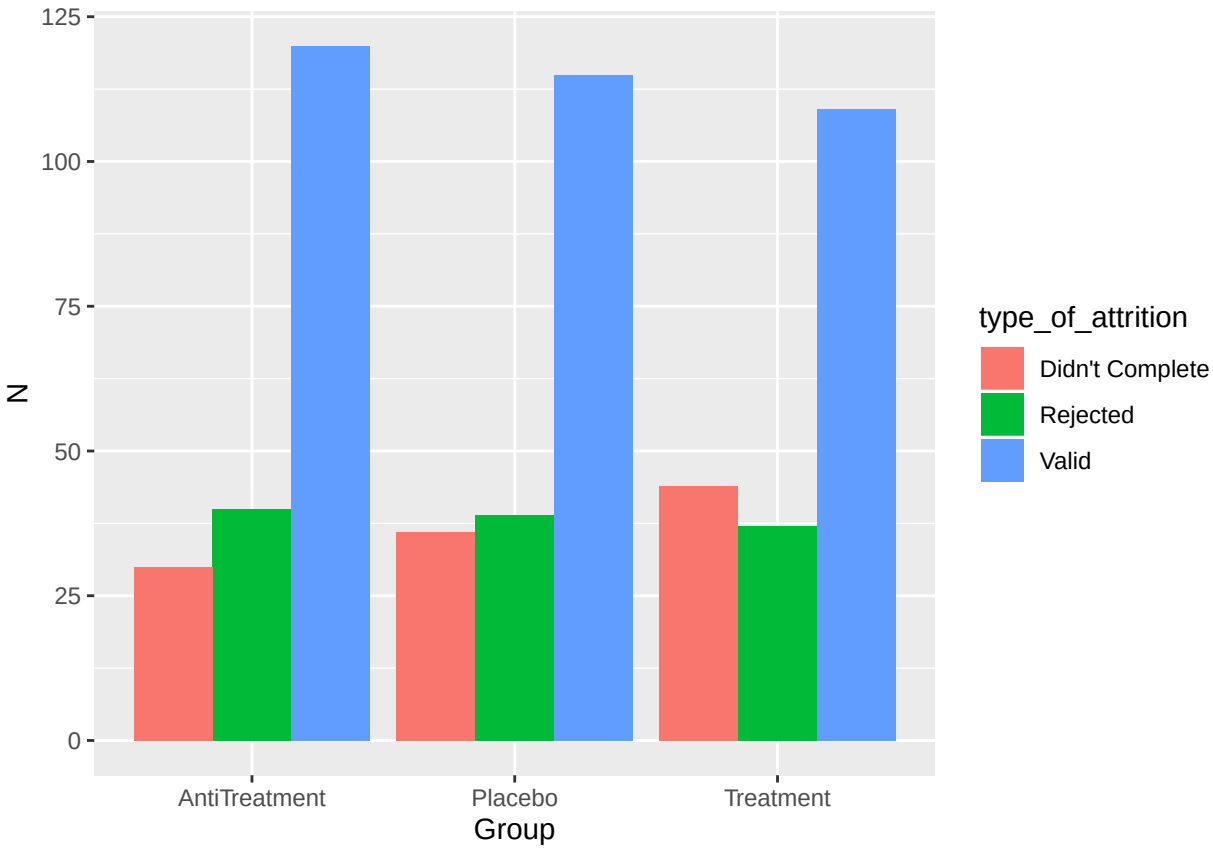
```
d_attrition_row <- d[,
                     .(type_of_attrition = ifelse(Progress==100 &
                                                  RejectedOutcomeQuestions!="Yes" &
                                                  RejectedCovariateQuestions!="Yes",
                                                  "Valid",
                                                  ifelse(Progress==100,
                                                         "Rejected",
                                                         "Didn't Complete")
                                                  )
                       ), by=.(Group)]
(d_attrition_summary_table <- table(d_attrition_row$Group,d_attrition_row$type_of_attrition))
```

```
##
##                 Didn't Complete Rejected Valid
##   AntiTreatment              30       40   120
##   Placebo                    36       39   115
##   Treatment                  44       37   109
```

```
chisq.test(d_attrition_summary_table)
```

```
##
##  Pearson's Chi-squared test
##
## data:  d_attrition_summary_table
## X-squared = 3.3407, df = 4, p-value = 0.5025
```

```
ggplot(d_attrition_row[,.N,by=.(Group,type_of_attrition)],
       aes(x=Group,fill=type_of_attrition,y=N))+geom_bar(position="dodge", stat="identity")
```



#Check survey time taken has statically different between groups

```
#Rank sum test for time taken to answer survey comparing treatment and placebo
(d_treatment_exp[,wilcox.test(SurveyTime~Group)])
```

```
##
##  Wilcoxon rank sum test with continuity correction
##
## data:  SurveyTime by Group
## W = 5890, p-value = 0.4368
## alternative hypothesis: true location shift is not equal to 0
```

```
#t test for time taken to answer survey comparing treatment and placebo
(d_treatment_exp[,t.test(SurveyTime~Group)])
```

```
##
##  Welch Two Sample t-test
##
## data:  SurveyTime by Group
## t = -1.0366, df = 130.69, p-value = 0.3018
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
##  -34.01782  10.62457
## sample estimates:
##   mean in group Placebo mean in group Treatment
##                50.11910                61.81572
```

```
#Rank sum test for time taken to answer survey comparing antitreatment and placebo
(d_antitreatment_exp[,wilcox.test(SurveyTime~Group)])
```

```
##
##  Wilcoxon rank sum test with continuity correction
##
## data:  SurveyTime by Group
## W = 7884, p-value = 0.05904
## alternative hypothesis: true location shift is not equal to 0
```

```
#t test for time taken to answer survey comparing antitreatment and placebo
(d_antitreatment_exp[,t.test(SurveyTime~Group)])
```

```
##
##  Welch Two Sample t-test
##
## data:  SurveyTime by Group
## t = 1.6747, df = 146.35, p-value = 0.09613
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
##  -3.255695 39.409137
## sample estimates:
## mean in group AntiTreatment       mean in group Placebo
##                    68.19582                    50.11910
```

```
#d_treatment_exp[,plot(treat_dummy,jitter(Y2_num))]
#lm_treat_test <- d_treatment_exp[,lm(Y1_num~treat_dummy+PreTreatment_factor+Education_factor+ClimateCh
lm_treat_test <- d_treatment_exp[,lm(Y1_num~treat_dummy+Age_factor+Education_factor+Gender_factor+  Livi
print(summary(lm_treat_test))
```

```
##
## Call:
## lm(formula = Y1_num ~ treat_dummy + Age_factor + Education_factor +
##     Gender_factor + LivingAreaAffected_factor + ClimateChangeAwareness_factor +
##     PreTreatment_factor + Income_factor + PoliticalView_factor +
##     Community_factor)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -2.74372 -0.24762  0.00274  0.27943  1.90898
##
## Coefficients:
##                                                  Estimate Std. Error
## (Intercept)                                      2.815884   0.454350
## treat_dummy                                      0.221123   0.088370
## Age_factor.L                                    -0.062307   0.153450
## Age_factor.Q                                    -0.166594   0.140905
## Age_factor.C                                     0.103122   0.118700
## Age_factor^4                                    -0.094707   0.100606
## Education_factor.L                              -0.249098   0.519276
## Education_factor.Q                              -0.158577   0.501878
## Education_factor.C                              -0.456997   0.381406
## Education_factor^4                              -0.314811   0.263398
## Education_factor^5                              -0.002984   0.147156
## Education_factor^6                               0.053827   0.138340
## Gender_factorMale                                0.144901   0.323275
## Gender_factorFemale                              0.045161   0.329398
## Gender_factorOther                              -0.638946   0.708571
```

```
## LivingAreaAffected_factor.L                            -0.056176   0.067532
## ClimateChangeAwareness_factor.L                         0.426335   0.505350
## ClimateChangeAwareness_factor.Q                        -0.244444   0.292804
## PreTreatment_factor.L                                   2.507453   0.168840
## PreTreatment_factor.Q                                  -0.442671   0.152437
## PreTreatment_factor.C                                   0.315028   0.141097
## PreTreatment_factor^4                                   0.161281   0.134642
## Income_factor.L                                         0.012927   0.411667
## Income_factor.Q                                         0.046858   0.349527
## Income_factor.C                                         0.015568   0.225625
## Income_factor^4                                         0.130609   0.134030
## PoliticalView_factorSlightly Liberal                    0.018529   0.131040
## PoliticalView_factorSlightly Conservative              -0.068912   0.147084
## PoliticalView_factorVery Conservative                  -0.236884   0.150688
## PoliticalView_factorNeither Conservative nor Liberal -0.040798   0.201896
## Community_factorSuburban                                0.143284   0.101572
## Community_factorRural                                  -0.126208   0.140934
##                                                        t value
## (Intercept)                                              6.198
## treat_dummy                                              2.502
## Age_factor.L                                            -0.406
## Age_factor.Q                                            -1.182
## Age_factor.C                                             0.869
## Age_factor^4                                            -0.941
## Education_factor.L                                      -0.480
## Education_factor.Q                                      -0.316
## Education_factor.C                                      -1.198
## Education_factor^4                                      -1.195
## Education_factor^5                                      -0.020
## Education_factor^6                                       0.389
## Gender_factorMale                                        0.448
## Gender_factorFemale                                      0.137
## Gender_factorOther                                      -0.902
## LivingAreaAffected_factor.L                             -0.832
## ClimateChangeAwareness_factor.L                          0.844
## ClimateChangeAwareness_factor.Q                         -0.835
## PreTreatment_factor.L                                   14.851
## PreTreatment_factor.Q                                   -2.904
## PreTreatment_factor.C                                    2.233
## PreTreatment_factor^4                                    1.198
## Income_factor.L                                          0.031
## Income_factor.Q                                          0.134
## Income_factor.C                                          0.069
## Income_factor^4                                          0.974
## PoliticalView_factorSlightly Liberal                     0.141
## PoliticalView_factorSlightly Conservative               -0.469
## PoliticalView_factorVery Conservative                   -1.572
## PoliticalView_factorNeither Conservative nor Liberal    -0.202
## Community_factorSuburban                                 1.411
## Community_factorRural                                   -0.896
##                                                        Pr(>|t|)
## (Intercept)                                       0.00000000343
## treat_dummy                                             0.01318
## Age_factor.L                                            0.68516
```

```
## Age_factor.Q                                                0.23854
## Age_factor.C                                                0.38606
## Age_factor^4                                                0.34770
## Education_factor.L                                          0.63198
## Education_factor.Q                                          0.75237
## Education_factor.C                                          0.23232
## Education_factor^4                                          0.23349
## Education_factor^5                                          0.98384
## Education_factor^6                                          0.69764
## Gender_factorMale                                           0.65449
## Gender_factorFemale                                         0.89109
## Gender_factorOther                                          0.36833
## LivingAreaAffected_factor.L                                 0.40653
## ClimateChangeAwareness_factor.L                             0.39992
## ClimateChangeAwareness_factor.Q                             0.40485
## PreTreatment_factor.L                          < 0.0000000000000002
## PreTreatment_factor.Q                                       0.00412
## PreTreatment_factor.C                                       0.02672
## PreTreatment_factor^4                                       0.23245
## Income_factor.L                                             0.97498
## Income_factor.Q                                             0.89350
## Income_factor.C                                             0.94506
## Income_factor^4                                             0.33105
## PoliticalView_factorSlightly Liberal                        0.88770
## PoliticalView_factorSlightly Conservative                   0.63995
## PoliticalView_factorVery Conservative                       0.11759
## PoliticalView_factorNeither Conservative nor Liberal        0.84007
## Community_factorSuburban                                    0.15996
## Community_factorRural                                       0.37164
##
## (Intercept)                                    ***
## treat_dummy                                    *
## Age_factor.L
## Age_factor.Q
## Age_factor.C
## Age_factor^4
## Education_factor.L
## Education_factor.Q
## Education_factor.C
## Education_factor^4
## Education_factor^5
## Education_factor^6
## Gender_factorMale
## Gender_factorFemale
## Gender_factorOther
## LivingAreaAffected_factor.L
## ClimateChangeAwareness_factor.L
## ClimateChangeAwareness_factor.Q
## PreTreatment_factor.L                          ***
## PreTreatment_factor.Q                          **
## PreTreatment_factor.C                          *
## PreTreatment_factor^4
## Income_factor.L
## Income_factor.Q
```

```
## Income_factor.C
## Income_factor^4
## PoliticalView_factorSlightly Liberal
## PoliticalView_factorSlightly Conservative
## PoliticalView_factorVery Conservative
## PoliticalView_factorNeither Conservative nor Liberal
## Community_factorSuburban
## Community_factorRural
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.6147 on 192 degrees of freedom
## Multiple R-squared:  0.7155, Adjusted R-squared:  0.6695
## F-statistic: 15.57 on 31 and 192 DF,  p-value: < 0.00000000000000022
```

```
lm_treat_test_2 <- d_treatment_exp[,lm(Y1_num~treat_dummy+PreTreatment)]
stargazer(lm_treat_test_2,se=list(sqrt(diag(vcovHC(lm_treat_test_2)))),type='text',header=F)
```

```
##
## ===========================================================
##                                    Dependent variable:
##                                -----------------------------
##                                           Y1_num
## -----------------------------------------------------------
## treat_dummy                                0.204**
##                                            (0.085)
##
## PreTreatmentSomewhat agree                  0.292
##                                            (0.221)
##
## PreTreatmentSomewhat disagree             -1.040***
##                                            (0.374)
##
## PreTreatmentStrongly agree                1.041***
##                                            (0.205)
##
## PreTreatmentStrongly disagree             -2.576***
##                                            (0.245)
##
## Constant                                  3.715***
##                                            (0.207)
##
## -----------------------------------------------------------
## Observations                                 224
## R2                                          0.675
## Adjusted R2                                 0.668
## Residual Std. Error                  0.616 (df = 218)
## F Statistic                       90.660*** (df = 5; 218)
## ===========================================================
## Note:                           *p<0.1; **p<0.05; ***p<0.01
```

```
lm_treat_test_3 <- d_treatment_exp[,lm(Y2_num~treat_dummy+PreTreatment)]
stargazer(lm_treat_test_3,se=list(sqrt(diag(vcovHC(lm_treat_test_3)))),type='text',header=F)
```

```
##
```

```
## ===========================================================
##                                     Dependent variable:
##                                 -------------------------
##                                            Y2_num
## -----------------------------------------------------------
## treat_dummy                                 0.023
##                                            (0.096)
##
## PreTreatmentSomewhat agree                  0.274
##                                            (0.182)
##
## PreTreatmentSomewhat disagree              -0.890**
##                                            (0.421)
##
## PreTreatmentStrongly agree                 0.748***
##                                            (0.163)
##
## PreTreatmentStrongly disagree              -1.540***
##                                            (0.424)
##
## Constant                                   4.033***
##                                            (0.165)
##
## -----------------------------------------------------------
## Observations                                 224
## R2                                          0.421
## Adjusted R2                                 0.408
## Residual Std. Error                  0.696 (df = 218)
## F Statistic                       31.697*** (df = 5; 218)
## ===========================================================
## Note:                           *p<0.1; **p<0.05; ***p<0.01
```

```
lm_treat_test_4 <- d_treatment_exp[,lm(Y3_num~treat_dummy+PreTreatment)]
stargazer(lm_treat_test_4,se=list(sqrt(diag(vcovHC(lm_treat_test_4)))),type='text',header=F)
```

```
##
## ===========================================================
##                                     Dependent variable:
##                                 -------------------------
##                                            Y3_num
## -----------------------------------------------------------
## treat_dummy                                 0.137
##                                            (0.174)
##
## PreTreatmentSomewhat agree                  0.046
##                                            (0.282)
##
## PreTreatmentSomewhat disagree               0.052
##                                            (0.370)
##
## PreTreatmentStrongly agree                  0.298
##                                            (0.282)
##
## PreTreatmentStrongly disagree              -0.956**
##                                            (0.393)
```

```
##
## Constant                                3.115***
##                                          (0.264)
##
## ---------------------------------------------------------
## Observations                               224
## R2                                        0.047
## Adjusted R2                               0.025
## Residual Std. Error                 1.291 (df = 218)
## F Statistic                       2.138* (df = 5; 218)
## =========================================================
## Note:                           *p<0.1; **p<0.05; ***p<0.01
```

```
lm_treat_test_5 <- d_treatment_exp[,lm(Y4_num~treat_dummy+PreTreatment)]
stargazer(lm_treat_test_5,se=list(sqrt(diag(vcovHC(lm_treat_test_5)))),type='text',header=F)
```

```
##
## =========================================================
##                                    Dependent variable:
##                                ---------------------------
##                                           Y4_num
## ---------------------------------------------------------
## treat_dummy                                0.040
##                                           (0.128)
##
## PreTreatmentSomewhat agree                0.636**
##                                           (0.277)
##
## PreTreatmentSomewhat disagree             -0.366
##                                           (0.451)
##
## PreTreatmentStrongly agree                1.191***
##                                           (0.265)
##
## PreTreatmentStrongly disagree            -1.605***
##                                           (0.495)
##
## Constant                                  3.194***
##                                           (0.264)
##
## ---------------------------------------------------------
## Observations                                224
## R2                                         0.357
## Adjusted R2                                0.343
## Residual Std. Error                  0.941 (df = 218)
## F Statistic                       24.244*** (df = 5; 218)
## =========================================================
## Note:                           *p<0.1; **p<0.05; ***p<0.01
```

```
lm_treat_test_6 <- d_treatment_exp[,lm(Y5_num~treat_dummy+PreTreatment)]
stargazer(lm_treat_test_6,se=list(sqrt(diag(vcovHC(lm_treat_test_6)))),type='text',header=F)
```

```
##
## =========================================================
##                                    Dependent variable:
```

```
##                                 ---------------------------
##                                           Y5_num
## ------------------------------------------------------------
## treat_dummy                                0.094
##                                           (0.185)
##
## PreTreatmentSomewhat agree                0.611**
##                                           (0.310)
##
## PreTreatmentSomewhat disagree             -0.457
##                                           (0.339)
##
## PreTreatmentStrongly agree               0.945***
##                                           (0.313)
##
## PreTreatmentStrongly disagree             -0.926*
##                                           (0.483)
##
## Constant                                 2.798***
##                                           (0.292)
##
## ------------------------------------------------------------
## Observations                                224
## R2                                         0.131
## Adjusted R2                                0.111
## Residual Std. Error                  1.364 (df = 218)
## F Statistic                        6.591*** (df = 5; 218)
## ============================================================
## Note:                            *p<0.1; **p<0.05; ***p<0.01
```

```
lm_treat_test_7 <- d_treatment_exp[,lm(Y6_num~treat_dummy+PreTreatment)]
stargazer(lm_treat_test_7,se=list(sqrt(diag(vcovHC(lm_treat_test_7)))),type='text',header=F)
```

```
##
## ============================================================
##                                    Dependent variable:
##                                 ---------------------------
##                                           Y6_num
## ------------------------------------------------------------
## treat_dummy                                0.134
##                                           (0.142)
##
## PreTreatmentSomewhat agree                0.508*
##                                           (0.268)
##
## PreTreatmentSomewhat disagree              0.046
##                                           (0.456)
##
## PreTreatmentStrongly agree               0.981***
##                                           (0.255)
##
## PreTreatmentStrongly disagree             -0.940*
##                                           (0.494)
##
## Constant                                 3.200***
```

```
##                                          (0.246)
##
## ------------------------------------------------------------
## Observations                               224
## R2                                        0.195
## Adjusted R2                               0.176
## Residual Std. Error                  1.029 (df = 218)
## F Statistic                        10.537*** (df = 5; 218)
## ============================================================
## Note:                           *p<0.1; **p<0.05; ***p<0.01
```

```
#d_antitreatment_exp[,plot(treat_dummy,jitter(Y2_num))]
#lm_antitreat_test <- d_antitreatment_exp[,lm(Y1_num~treat_dummy+PreTreatment_factor+Education_factor+C
lm_antitreat_test <- d_antitreatment_exp[,lm(Y1_num~treat_dummy+Age_factor+Education_factor+Gender_facto
print(summary(lm_antitreat_test))
```

```
##
## Call:
## lm(formula = Y1_num ~ treat_dummy + Age_factor + Education_factor +
##     Gender_factor + LivingAreaAffected_factor + ClimateChangeAwareness_factor +
##     PreTreatment_factor + Income_factor + PoliticalView_factor +
##     Community_factor)
##
## Residuals:
##     Min      1Q  Median      3Q     Max
## -3.2814 -0.4183  0.0968  0.4872  1.8213
##
## Coefficients:
##                                                  Estimate Std. Error
## (Intercept)                                       3.48117    0.71031
## treat_dummy                                      -0.26645    0.11815
## Age_factor.L                                     -0.29111    0.22728
## Age_factor.Q                                      0.16544    0.20355
## Age_factor.C                                      0.21798    0.17187
## Age_factor^4                                      0.08233    0.14000
## Education_factor.L                               -0.32519    0.61098
## Education_factor.Q                                0.55544    0.60196
## Education_factor.C                               -0.67973    0.45546
## Education_factor^4                               -0.21626    0.32548
## Education_factor^5                                0.03147    0.18091
## Education_factor^6                                0.11306    0.17256
## Gender_factorMale                                 0.06355    0.64244
## Gender_factorFemale                               0.10134    0.64757
## Gender_factorOther                               -0.73957    0.86494
## LivingAreaAffected_factor.L                      -0.13014    0.08907
## ClimateChangeAwareness_factor.L                   0.47987    0.48035
## ClimateChangeAwareness_factor.Q                  -0.05696    0.28755
## PreTreatment_factor.L                             2.33550    0.20496
## PreTreatment_factor.Q                            -0.11314    0.18801
## PreTreatment_factor.C                            -0.13257    0.16324
## PreTreatment_factor^4                             0.31569    0.17588
## Income_factor.L                                   0.54543    0.25637
## Income_factor.Q                                   0.30416    0.22668
## Income_factor.C                                   0.05099    0.18594
## Income_factor^4                                   0.42956    0.15688
```

```
## PoliticalView_factorSlightly Liberal                 -0.25322    0.17302
## PoliticalView_factorSlightly Conservative            -0.31235    0.19543
## PoliticalView_factorVery Conservative                -0.37046    0.19226
## PoliticalView_factorNeither Conservative nor Liberal -0.43918    0.25788
## Community_factorSuburban                             -0.14203    0.13356
## Community_factorRural                                -0.06465    0.17690
##                                                      t value
## (Intercept)                                            4.901
## treat_dummy                                           -2.255
## Age_factor.L                                          -1.281
## Age_factor.Q                                           0.813
## Age_factor.C                                           1.268
## Age_factor^4                                           0.588
## Education_factor.L                                    -0.532
## Education_factor.Q                                     0.923
## Education_factor.C                                    -1.492
## Education_factor^4                                    -0.664
## Education_factor^5                                     0.174
## Education_factor^6                                     0.655
## Gender_factorMale                                      0.099
## Gender_factorFemale                                    0.156
## Gender_factorOther                                    -0.855
## LivingAreaAffected_factor.L                           -1.461
## ClimateChangeAwareness_factor.L                        0.999
## ClimateChangeAwareness_factor.Q                       -0.198
## PreTreatment_factor.L                                 11.395
## PreTreatment_factor.Q                                 -0.602
## PreTreatment_factor.C                                 -0.812
## PreTreatment_factor^4                                  1.795
## Income_factor.L                                        2.128
## Income_factor.Q                                        1.342
## Income_factor.C                                        0.274
## Income_factor^4                                        2.738
## PoliticalView_factorSlightly Liberal                  -1.464
## PoliticalView_factorSlightly Conservative             -1.598
## PoliticalView_factorVery Conservative                 -1.927
## PoliticalView_factorNeither Conservative nor Liberal  -1.703
## Community_factorSuburban                              -1.063
## Community_factorRural                                 -0.365
##                                                        Pr(>|t|)
## (Intercept)                                         0.00000195
## treat_dummy                                            0.02519
## Age_factor.L                                           0.20172
## Age_factor.Q                                           0.41731
## Age_factor.C                                           0.20615
## Age_factor^4                                           0.55712
## Education_factor.L                                     0.59513
## Education_factor.Q                                     0.35724
## Education_factor.C                                     0.13715
## Education_factor^4                                     0.50717
## Education_factor^5                                     0.86209
## Education_factor^6                                     0.51310
## Gender_factorMale                                      0.92130
## Gender_factorFemale                                    0.87580
```

```
## Gender_factorOther                                                0.39353
## LivingAreaAffected_factor.L                                       0.14554
## ClimateChangeAwareness_factor.L                                   0.31898
## ClimateChangeAwareness_factor.Q                                   0.84316
## PreTreatment_factor.L                                < 0.0000000000000002
## PreTreatment_factor.Q                                             0.54801
## PreTreatment_factor.C                                             0.41766
## PreTreatment_factor^4                                             0.07415
## Income_factor.L                                                   0.03458
## Income_factor.Q                                                   0.18115
## Income_factor.C                                                   0.78418
## Income_factor^4                                                   0.00673
## PoliticalView_factorSlightly Liberal                              0.14487
## PoliticalView_factorSlightly Conservative                         0.11153
## PoliticalView_factorVery Conservative                             0.05539
## PoliticalView_factorNeither Conservative nor Liberal              0.09009
## Community_factorSuburban                                          0.28885
## Community_factorRural                                             0.71515
##
## (Intercept)                                          ***
## treat_dummy                                          *
## Age_factor.L
## Age_factor.Q
## Age_factor.C
## Age_factor^4
## Education_factor.L
## Education_factor.Q
## Education_factor.C
## Education_factor^4
## Education_factor^5
## Education_factor^6
## Gender_factorMale
## Gender_factorFemale
## Gender_factorOther
## LivingAreaAffected_factor.L
## ClimateChangeAwareness_factor.L
## ClimateChangeAwareness_factor.Q
## PreTreatment_factor.L                                ***
## PreTreatment_factor.Q
## PreTreatment_factor.C
## PreTreatment_factor^4                                .
## Income_factor.L                                      *
## Income_factor.Q
## Income_factor.C
## Income_factor^4                                      **
## PoliticalView_factorSlightly Liberal
## PoliticalView_factorSlightly Conservative
## PoliticalView_factorVery Conservative                .
## PoliticalView_factorNeither Conservative nor Liberal .
## Community_factorSuburban
## Community_factorRural
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
```

```
## Residual standard error: 0.844 on 203 degrees of freedom
## Multiple R-squared:  0.6383, Adjusted R-squared:  0.583
## F-statistic: 11.55 on 31 and 203 DF,  p-value: < 0.00000000000000022
```

```
lm_antitreat_test_2 <- d_antitreatment_exp[,lm(Y1_num~treat_dummy+PreTreatment)]
stargazer(lm_antitreat_test_2,se=list(sqrt(diag(vcovHC(lm_antitreat_test_2)))),type='text',header=F)
```

```
##
## ===========================================================
##                                     Dependent variable:
##                                 ------------------------
##                                           Y1_num
## -----------------------------------------------------------
## treat_dummy                              -0.273**
##                                           (0.119)
##
## PreTreatmentSomewhat agree                0.314
##                                           (0.263)
##
## PreTreatmentSomewhat disagree            -1.333***
##                                           (0.287)
##
## PreTreatmentStrongly agree               1.126***
##                                           (0.245)
##
## PreTreatmentStrongly disagree            -2.115***
##                                           (0.347)
##
## Constant                                 3.660***
##                                           (0.237)
##
## -----------------------------------------------------------
## Observations                                235
## R2                                         0.546
## Adjusted R2                                0.536
## Residual Std. Error                  0.890 (df = 229)
## F Statistic                       55.165*** (df = 5; 229)
## ===========================================================
## Note:                           *p<0.1; **p<0.05; ***p<0.01
```

```
lm_antitreat_test_3 <- d_antitreatment_exp[,lm(Y2_num~treat_dummy+PreTreatment)]
stargazer(lm_antitreat_test_3,se=list(sqrt(diag(vcovHC(lm_antitreat_test_3)))),type='text',header=F)
```

```
##
## ===========================================================
##                                     Dependent variable:
##                                 ------------------------
##                                           Y2_num
## -----------------------------------------------------------
## treat_dummy                              -0.411***
##                                           (0.122)
##
## PreTreatmentSomewhat agree                0.427*
##                                           (0.232)
##
```

```
## PreTreatmentSomewhat disagree          -0.865**
##                                         (0.341)
##
## PreTreatmentStrongly agree             0.959***
##                                         (0.219)
##
## PreTreatmentStrongly disagree          -1.396***
##                                         (0.435)
##
## Constant                               3.882***
##                                         (0.207)
##
## ---------------------------------------------------------
## Observations                              235
## R2                                        0.409
## Adjusted R2                               0.397
## Residual Std. Error                  0.900 (df = 229)
## F Statistic                       31.753*** (df = 5; 229)
## =========================================================
## Note:                           *p<0.1; **p<0.05; ***p<0.01
```

```
lm_antitreat_test_4 <- d_antitreatment_exp[,lm(Y3_num~treat_dummy+PreTreatment)]
stargazer(lm_antitreat_test_4,se=list(sqrt(diag(vcovHC(lm_antitreat_test_4)))),type='text',header=F)
```

```
##
## =========================================================
##                                   Dependent variable:
##                               ----------------------------
##                                          Y3_num
## ---------------------------------------------------------
## treat_dummy                              -0.225
##                                          (0.172)
##
## PreTreatmentSomewhat agree                0.016
##                                          (0.311)
##
## PreTreatmentSomewhat disagree            -0.356
##                                          (0.364)
##
## PreTreatmentStrongly agree                0.067
##                                          (0.314)
##
## PreTreatmentStrongly disagree            -0.932**
##                                          (0.391)
##
## Constant                                 3.252***
##                                          (0.286)
##
## ---------------------------------------------------------
## Observations                               235
## R2                                        0.046
## Adjusted R2                               0.026
## Residual Std. Error                  1.303 (df = 229)
## F Statistic                        2.231* (df = 5; 229)
## =========================================================
```

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

```
lm_antitreat_test_5 <- d_antitreatment_exp[,lm(Y4_num~treat_dummy+PreTreatment)]
stargazer(lm_antitreat_test_5,se=list(sqrt(diag(vcovHC(lm_antitreat_test_5)))),type='text',header=F)
```

```
##
## ===========================================================
##                                    Dependent variable:
##                                ---------------------------
##                                           Y4_num
## -----------------------------------------------------------
## treat_dummy                               -0.492***
##                                            (0.136)
##
## PreTreatmentSomewhat agree                 0.458*
##                                            (0.276)
##
## PreTreatmentSomewhat disagree             -0.925**
##                                            (0.359)
##
## PreTreatmentStrongly agree                1.040***
##                                            (0.263)
##
## PreTreatmentStrongly disagree             -1.549***
##                                            (0.363)
##
## Constant                                  3.345***
##                                            (0.261)
##
## -----------------------------------------------------------
## Observations                                 235
## R2                                          0.398
## Adjusted R2                                 0.385
## Residual Std. Error                  1.013 (df = 229)
## F Statistic                       30.306*** (df = 5; 229)
## ===========================================================
## Note:                          *p<0.1; **p<0.05; ***p<0.01
```

```
lm_antitreat_test_6 <- d_antitreatment_exp[,lm(Y5_num~treat_dummy+PreTreatment)]
stargazer(lm_antitreat_test_6,se=list(sqrt(diag(vcovHC(lm_antitreat_test_6)))),type='text',header=F)
```

```
##
## ===========================================================
##                                    Dependent variable:
##                                ---------------------------
##                                           Y5_num
## -----------------------------------------------------------
## treat_dummy                               -0.111
##                                            (0.176)
##
## PreTreatmentSomewhat agree                 0.253
##                                            (0.307)
##
## PreTreatmentSomewhat disagree             -0.697**
##                                            (0.340)
```

```
##
## PreTreatmentStrongly agree               0.470
##                                         (0.317)
##
## PreTreatmentStrongly disagree          -1.510***
##                                         (0.370)
##
## Constant                               3.169***
##                                         (0.289)
##
## ------------------------------------------------------------
## Observations                              235
## R2                                        0.143
## Adjusted R2                               0.125
## Residual Std. Error                 1.335 (df = 229)
## F Statistic                       7.672*** (df = 5; 229)
## ============================================================
## Note:                           *p<0.1; **p<0.05; ***p<0.01
```

```
lm_antitreat_test_7 <- d_antitreatment_exp[,lm(Y6_num~treat_dummy+PreTreatment)]
stargazer(lm_antitreat_test_7,se=list(sqrt(diag(vcovHC(lm_antitreat_test_7)))),type='text',header=F)
```

```
##
## ============================================================
##                                    Dependent variable:
##                                ---------------------------
##                                           Y6_num
## ------------------------------------------------------------
## treat_dummy                               -0.101
##                                           (0.130)
##
## PreTreatmentSomewhat agree                 0.379
##                                           (0.238)
##
## PreTreatmentSomewhat disagree             -0.367
##                                           (0.322)
##
## PreTreatmentStrongly agree               0.786***
##                                           (0.226)
##
## PreTreatmentStrongly disagree           -1.462***
##                                           (0.367)
##
## Constant                                 3.383***
##                                           (0.221)
##
## ------------------------------------------------------------
## Observations                                235
## R2                                          0.269
## Adjusted R2                                 0.253
## Residual Std. Error                   0.989 (df = 229)
## F Statistic                         16.834*** (df = 5; 229)
## ============================================================
## Note:                           *p<0.1; **p<0.05; ***p<0.01
```

```
d_treatment_exp[,SuperGroup:="Treatment"]
d_antitreatment_exp[,SuperGroup:="AntiTreatment"]
d_compare_set <- rbind(d_treatment_exp,d_antitreatment_exp)
d_compare_set[,AntiTreatGroup:=ifelse(SuperGroup=="AntiTreatment",1,0)]
d_compare_set[,treat_dummy:=ifelse(Group=="Placebo",0,1)]
lm_treat_vs_anti_1 <- d_compare_set[,lm(Y1_num~treat_dummy+AntiTreatGroup+AntiTreatGroup*treat_dummy+Pr
lm_treat_vs_anti_2 <- d_compare_set[,lm(Y2_num~treat_dummy+AntiTreatGroup+AntiTreatGroup*treat_dummy+Pr
lm_treat_vs_anti_3 <- d_compare_set[,lm(Y4_num~treat_dummy+AntiTreatGroup+AntiTreatGroup*treat_dummy+Pr
stargazer(lm_treat_vs_anti_1,lm_treat_vs_anti_2,lm_treat_vs_anti_3,se=list(sqrt(diag(vcovHC(lm_treat_vs
```

Table 1:

	Dependent variable:		
	Y1_num	Y2_num	Y4_num
	(1)	(2)	(3)
treat_dummy	0.208**	0.016	0.046
	(0.084)	(0.094)	(0.126)
AntiTreatGroup	0.000	−0.000	0.000
	(0.090)	(0.099)	(0.128)
PreTreatmentSomewhat agree	0.302*	0.349**	0.549***
	(0.169)	(0.145)	(0.193)
PreTreatmentSomewhat disagree	−1.223***	−0.893***	−0.684**
	(0.219)	(0.253)	(0.274)
PreTreatmentStrongly agree	1.082***	0.851***	1.117***
	(0.156)	(0.134)	(0.184)
PreTreatmentStrongly disagree	−2.304***	−1.471***	−1.553***
	(0.223)	(0.297)	(0.284)
treat_dummy:AntiTreatGroup	−0.487***	−0.426***	−0.551***
	(0.145)	(0.152)	(0.185)
Constant	3.688***	3.960***	3.269***
	(0.160)	(0.139)	(0.194)
Observations	459	459	459
R^2	0.604	0.426	0.393
Adjusted R^2	0.598	0.417	0.384
Residual Std. Error (df = 451)	0.768	0.804	0.977
F Statistic (df = 7; 451)	98.258***	47.823***	41.742***
Note:			*p<0.1; **p<0.05; ***p<0.01

```
d_compare_set <- rbind(d_treatment_exp,d_antitreatment_exp)
```

```
polr_treat_test_1 <- d_treatment_exp[,polr(Y1_num_factor~treat_dummy+PreTreatment,Hess = T)]
ctable_treat_test_1 <- coef(summary(polr_treat_test_1))
p <- round(pnorm(abs(ctable_treat_test_1[, "t value"]), lower.tail = FALSE) * 2,5)
```

```r
interpret <- exp(coef(polr_treat_test_1))
ctable_treat_test_1 <- cbind(ctable_treat_test_1, "p value" = p)
ctable_treat_test_1 <- cbind(ctable_treat_test_1,"exp.coef" = interpret)
```

```
## Warning in cbind(ctable_treat_test_1, exp.coef = interpret): number of rows
## of result is not a multiple of vector length (arg 2)
```

```r
print(data.frame(ctable_treat_test_1))
```

```
##                                 Value Std..Error    t.value p.value
## treat_dummy                 0.8094909  0.3155453  2.5653709 0.01031
## PreTreatmentSomewhat agree  0.8619492  0.4979668  1.7309372 0.08346
## PreTreatmentSomewhat disagree -2.1734377  0.7302076 -2.9764655 0.00292
## PreTreatmentStrongly agree  3.5972074  0.5530039  6.5048501 0.00000
## PreTreatmentStrongly disagree -5.9808464  1.1633454 -5.1410752 0.00000
## 1|2                        -4.2613907  0.8796511 -4.8444102 0.00000
## 2|3                        -2.2627753  0.5686357 -3.9793055 0.00007
## 3|4                        -0.4156030  0.4518844 -0.9197109 0.35772
## 4|5                         2.0937208  0.5026910  4.1650250 0.00003
##                                exp.coef
## treat_dummy                 2.246763762
## PreTreatmentSomewhat agree  2.367771502
## PreTreatmentSomewhat disagree  0.113785784
## PreTreatmentStrongly agree 36.496172978
## PreTreatmentStrongly disagree  0.002526687
## 1|2                         2.246763762
## 2|3                         2.367771502
## 3|4                         0.113785784
## 4|5                        36.496172978
```

```r
polr_anti_treat_test_1 <- d_antitreatment_exp[,polr(Y1_num_factor~treat_dummy+PreTreatment,Hess = T)]
ctable_anti_treat_test_1 <- coef(summary(polr_anti_treat_test_1))
p <- round(pnorm(abs(ctable_anti_treat_test_1[, "t value"]), lower.tail = FALSE) * 2,5)
interpret <- exp(coef(polr_anti_treat_test_1))
ctable_anti_treat_test_1 <- cbind(ctable_anti_treat_test_1, "p value" = p)
ctable_anti_treat_test_1 <- cbind(ctable_anti_treat_test_1,"exp.coef" = interpret)
```

```
## Warning in cbind(ctable_anti_treat_test_1, exp.coef = interpret): number of
## rows of result is not a multiple of vector length (arg 2)
```

```r
print(data.frame(ctable_anti_treat_test_1))
```

```
##                                 Value Std..Error   t.value p.value
## treat_dummy                -0.4177746  0.2665786 -1.567172 0.11707
## PreTreatmentSomewhat agree  0.6189873  0.4542550  1.362643 0.17300
## PreTreatmentSomewhat disagree -1.9738795  0.5627989 -3.507255 0.00045
## PreTreatmentStrongly agree  2.8056873  0.4895590  5.731051 0.00000
## PreTreatmentStrongly disagree -4.1223169  0.8147345 -5.059706 0.00000
## 1|2                        -3.0193286  0.5173937 -5.835650 0.00000
## 2|3                        -1.6982522  0.4413334 -3.848003 0.00012
## 3|4                        -0.6698653  0.4165513 -1.608122 0.10781
## 4|5                         1.5421047  0.4437158  3.475434 0.00051
##                               exp.coef
## treat_dummy                 0.65851066
## PreTreatmentSomewhat agree  1.85704637
## PreTreatmentSomewhat disagree  0.13891688
```

```
## PreTreatmentStrongly agree    16.53843833
## PreTreatmentStrongly disagree  0.01620692
## 1|2                            0.65851066
## 2|3                            1.85704637
## 3|4                            0.13891688
## 4|5                           16.53843833
```

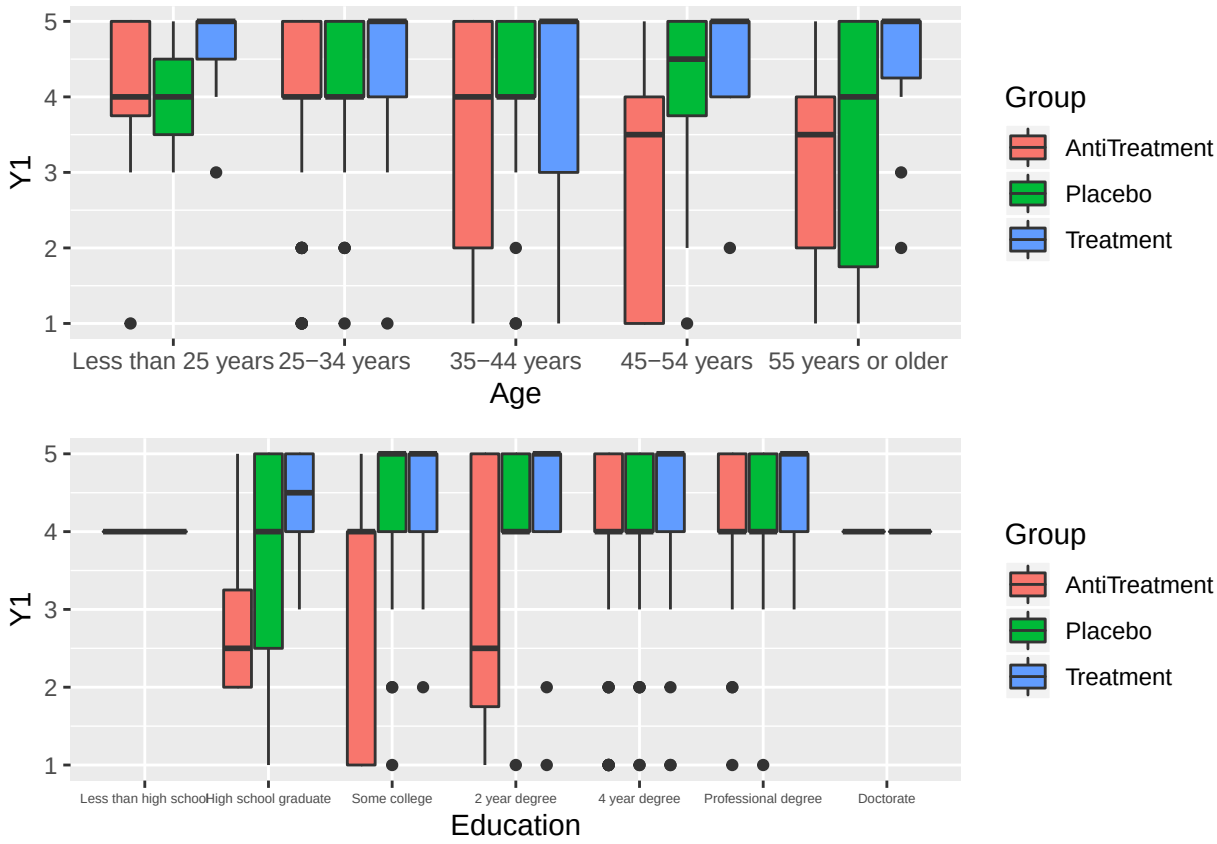
```
polr_anti_treat_test_2 <- d_antitreatment_exp[,polr(Y2_num_factor~treat_dummy+PreTreatment,Hess = T)]

ctable_anti_treat_test_2 <- coef(summary(polr_anti_treat_test_2))
p <- round(pnorm(abs(ctable_anti_treat_test_2[, "t value"]), lower.tail = FALSE) * 2,5)
interpret <- exp(coef(polr_anti_treat_test_2))
ctable_anti_treat_test_2 <- cbind(ctable_anti_treat_test_2, "p value" = p)
ctable_anti_treat_test_2 <- cbind(ctable_anti_treat_test_2,"exp.coef" = interpret)
```

```
## Warning in cbind(ctable_anti_treat_test_2, exp.coef = interpret): number of
## rows of result is not a multiple of vector length (arg 2)
```

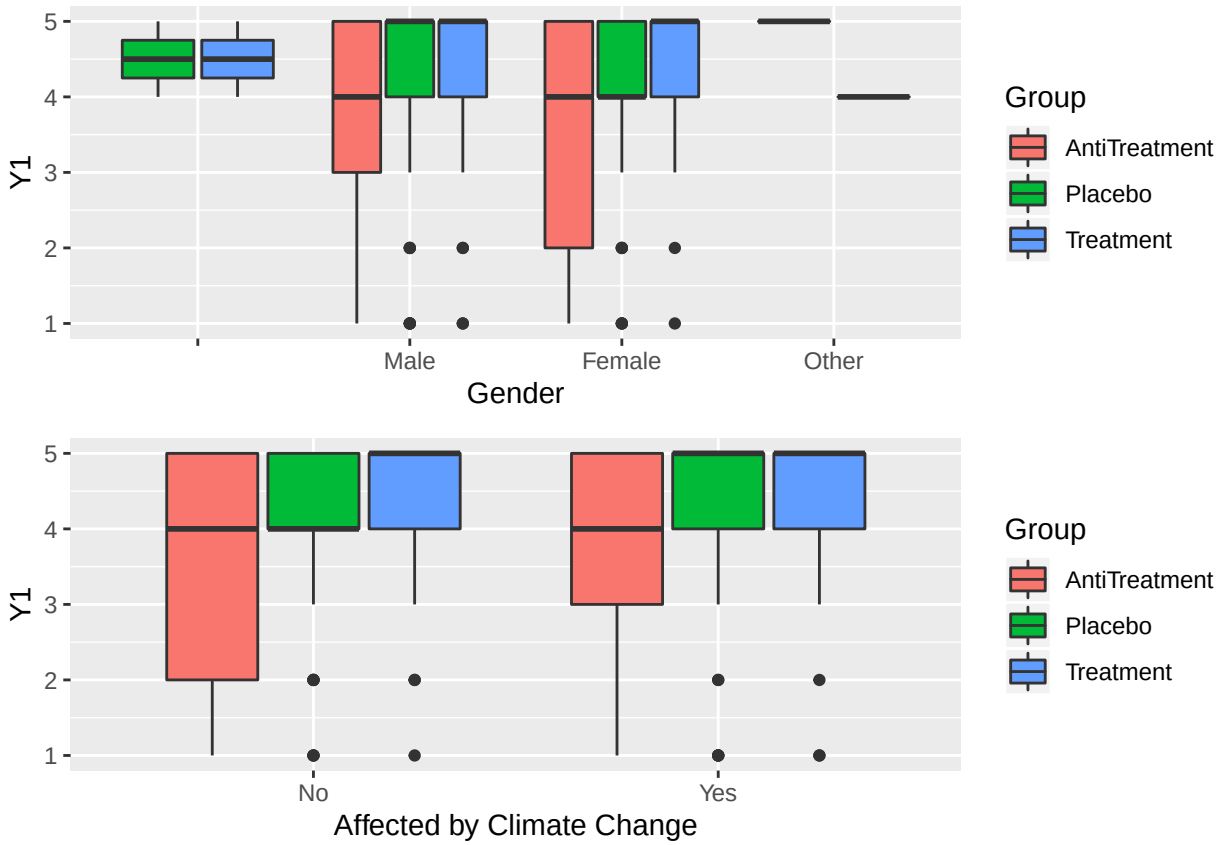
```
print(data.frame(ctable_anti_treat_test_2))
```

```
##                                  Value Std..Error   t.value p.value
## treat_dummy                  -0.7803546  0.2671432 -2.921110 0.00349
## PreTreatmentSomewhat agree    0.7930637  0.4373007  1.813543 0.06975
## PreTreatmentSomewhat disagree -1.2868797  0.5630057 -2.285731 0.02227
## PreTreatmentStrongly agree    2.3071925  0.4618155  4.995918 0.00000
## PreTreatmentStrongly disagree -2.3815254  0.6743921 -3.531366 0.00041
## 1|2                           -3.3651977  0.5184288 -6.491148 0.00000
## 2|3                           -2.0513205  0.4306660 -4.763135 0.00000
## 3|4                           -0.8685487  0.3990236 -2.176685 0.02950
## 4|5                            0.8765312  0.4055910  2.161121 0.03069
##                                  exp.coef
## treat_dummy                     0.45824347
## PreTreatmentSomewhat agree      2.21015721
## PreTreatmentSomewhat disagree   0.27613105
## PreTreatmentStrongly agree     10.04618081
## PreTreatmentStrongly disagree   0.09240951
## 1|2                             0.45824347
## 2|3                             2.21015721
## 3|4                             0.27613105
## 4|5                            10.04618081
```

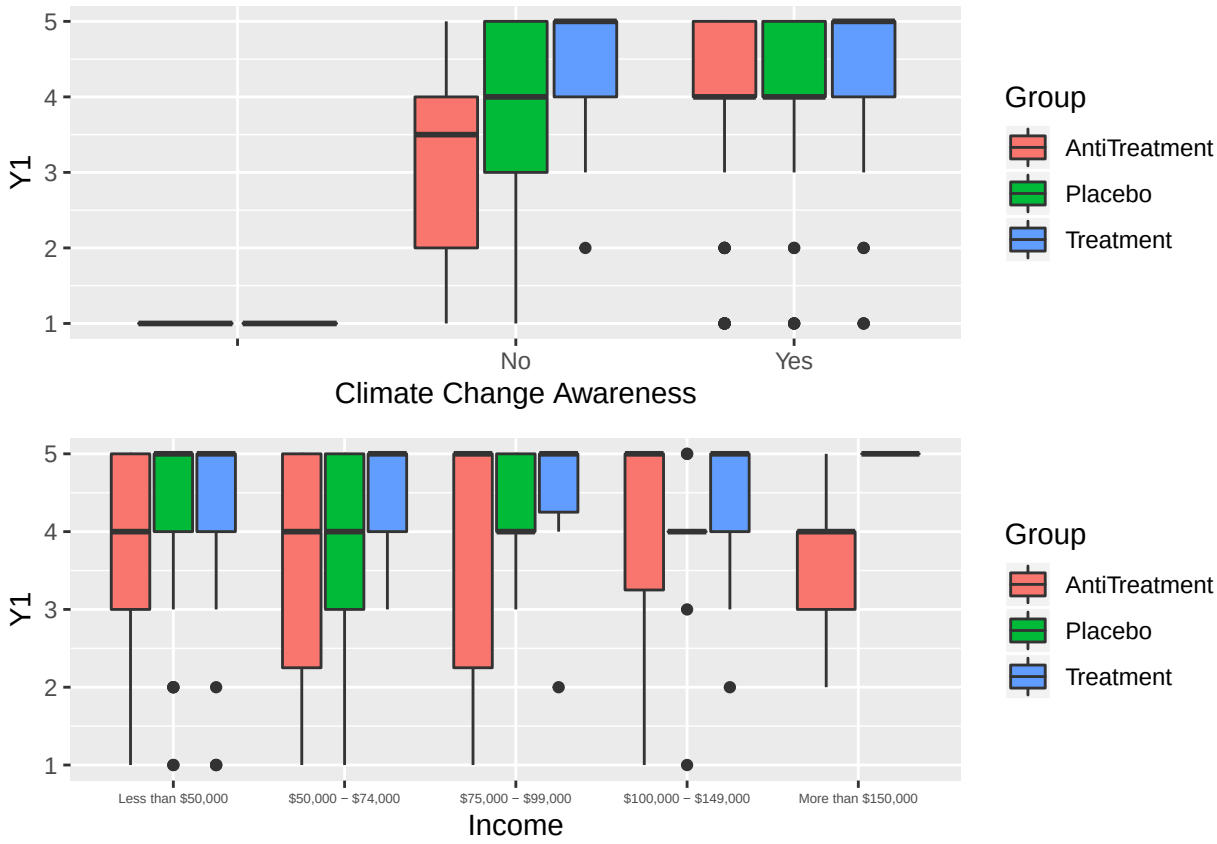
```
data_plot <- d[Progress==100&RejectedOutcomeQuestions!="Yes"&RejectedCovariateQuestions!="Yes",]
g <- ggplot(data_plot)
plot1 <- g + geom_boxplot(aes(x=Age_factor, y=Y1_num, fill=Group))+labs(x='Age',y='Y1')
plot2 <- g+geom_boxplot(aes(x=Education_factor, y=Y1_num, fill=Group))+labs(x='Education',y='Y1')+theme
plot3 <- g+geom_boxplot(aes(x=Gender_factor, y=Y1_num, fill=Group))+labs(x='Gender',y='Y1')
plot4 <- g+geom_boxplot(aes(x=LivingAreaAffected_factor, y=Y1_num, fill=Group))+labs(x='Affected by Cli
plot5 <- g+geom_boxplot(aes(x=ClimateChangeAwareness_factor, y=Y1_num, fill=Group))+labs(x='Climate Cha
plot6 <- g+geom_boxplot(aes(x=Income_factor, y=Y1_num, fill=Group))+labs(x='Income',y='Y1')+theme(axis.
plot7 <- g+geom_boxplot(aes(x=PreTreatment_factor, y=Y1_num, fill=Group))+labs(x='Pre Experiment Percep
plot8 <- g+geom_boxplot(aes(x=PoliticalView_factor, y=Y1_num, fill=Group))+labs(x='Political View',y='Y
plot9 <- g+geom_boxplot(aes(x=Community_factor, y=Y1_num, fill=Group))+labs(x='Community',y='Y1')
grid.arrange(plot1,plot2,nrow=2)
```



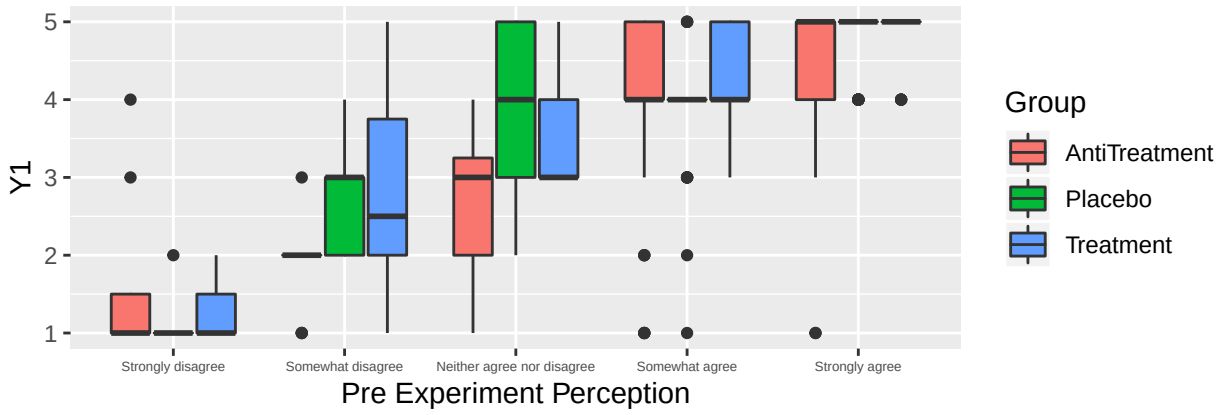

```
grid.arrange(plot3,plot4,nrow=2)
```

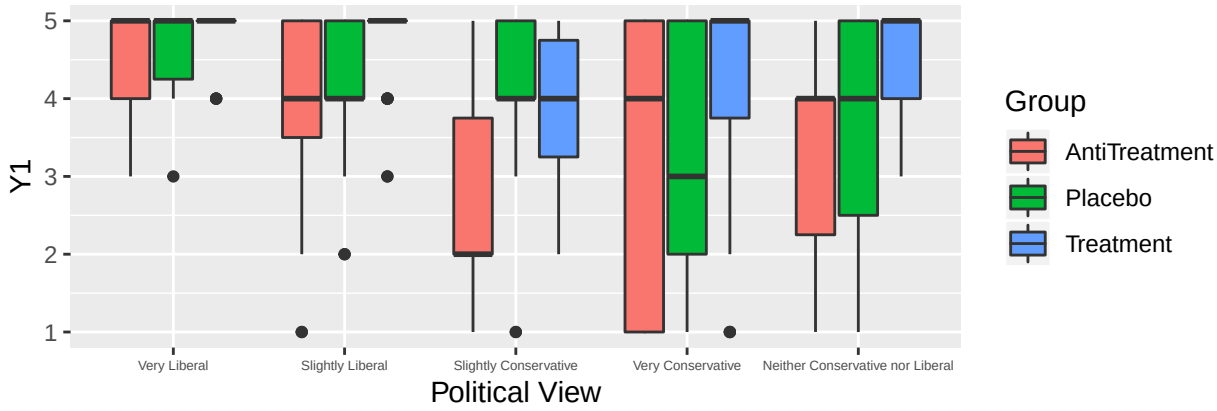



```
grid.arrange(plot5,plot6,nrow=2)
```

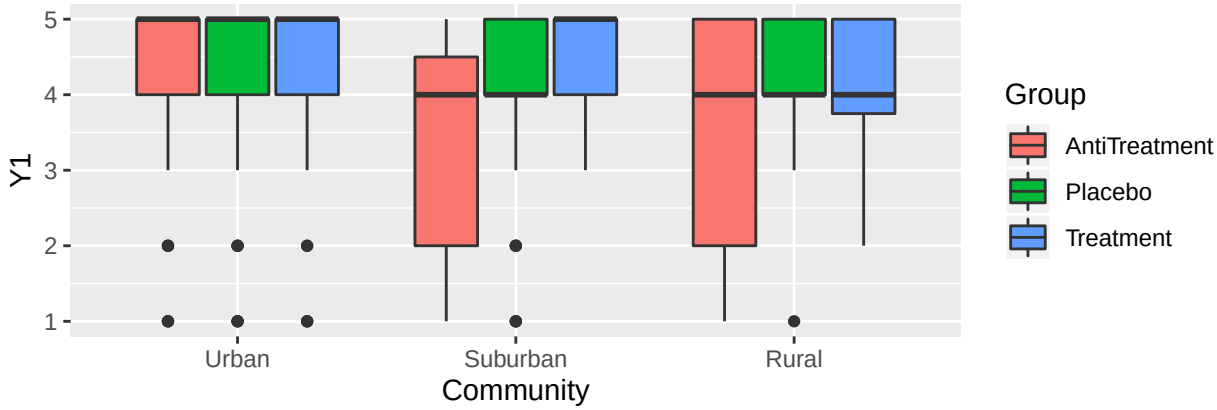



```
grid.arrange(plot7,plot8,nrow=2)
```






```
grid.arrange(plot9,nrow=2)
```




```
stargazer(lm_treat_test_2,se=list(sqrt(diag(vcovHC(lm_treat_test_2)))),type="latex",header=F)
```

```
stargazer(lm_antitreat_test_2,lm_antitreat_test_3,lm_antitreat_test_5,se=list(sqrt(diag(vcovHC(lm_antiti
```

Table 2:

	Dependent variable:
	Y1_num
treat_dummy	0.204**
	(0.085)
PreTreatmentSomewhat agree	0.292
	(0.221)
PreTreatmentSomewhat disagree	−1.040***
	(0.374)
PreTreatmentStrongly agree	1.041***
	(0.205)
PreTreatmentStrongly disagree	−2.576***
	(0.245)
Constant	3.715***
	(0.207)
Observations	224
R^2	0.675
Adjusted R^2	0.668
Residual Std. Error	0.616 (df = 218)
F Statistic	90.660*** (df = 5; 218)
Note:	*p<0.1; **p<0.05; ***p<0.01

Table 3:

	Dependent variable:		
	Y1_num	Y2_num	Y4_num
	(1)	(2)	(3)
treat_dummy	-0.273^{**}	-0.411^{***}	-0.492^{***}
	(0.119)	(0.122)	(0.136)
PreTreatmentSomewhat agree	0.314	0.427^{*}	0.458^{*}
	(0.263)	(0.232)	(0.276)
PreTreatmentSomewhat disagree	-1.333^{***}	-0.865^{**}	-0.925^{**}
	(0.287)	(0.341)	(0.359)
PreTreatmentStrongly agree	1.126^{***}	0.959^{***}	1.040^{***}
	(0.245)	(0.219)	(0.263)
PreTreatmentStrongly disagree	-2.115^{***}	-1.396^{***}	-1.549^{***}
	(0.347)	(0.435)	(0.363)
Constant	3.660^{***}	3.882^{***}	3.345^{***}
	(0.237)	(0.207)	(0.261)
Observations	235	235	235
R^2	0.546	0.409	0.398
Adjusted R^2	0.536	0.397	0.385
Residual Std. Error (df = 229)	0.890	0.900	1.013
F Statistic (df = 5; 229)	55.165^{***}	31.753^{***}	30.306^{***}
Note:			*p<0.1; **p<0.05; ***p<0.01