

# ALP Refugee inclusion

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This document is meant to be a replicable file for any analysis conducted on the data collected by Adida, Lo and Platas Izama (ALP) in the project “Engendering empathy among Americans can promote inclusionary behavior toward Syrian refugees” (2018). This is the full dataset of 5,400 observations.

Key dependent variables are Y2 and Y6, secondary dependent variables are Y1 and *Backlash* (**survey\_neg**). Below is a list of some of the most commonly used variables and short descriptions of each. Note some of the variables described below will be created in the data cleaning portion of this rmd file. For a longer description on all variables in the dataset, please see the ALP codebook.

Name	Description
Treatment_Group	Categorical variable taking values 1-6
Control	Binary variable for whether respondent was randomized Control treatment
Empathy	Binary variable for whether respondent was randomized Empathy treatment
Persuasion	Binary variable for whether respondent was randomized Information treatment
sex	Binary variable for whether respondent is female (1) or male (0)
birthyr	Continuous variable for year of birth of respondent
birthcountry	Categorical variable for country of birth of respondent
educ	Ordered categorical variable for education level of respondent (1 lowest, 6 highest)
religpew	Ordered categorical variable for Pew religion of respondent
partyid3	3-pt party ID variable, inclusive of categories for other and not sure
ethnocentric1	Continuous variable for adapted ethnocentric measure of respondent
choose_muslim	Binary variable (Y1) for whether the respondent chooses the Muslim (1) profile or Christian (0)
Y2/Y3	Respondent scale of acceptance of refugee 1/2 in each presented conjoint profile pair, from 1-7
Y4	Binary variable for whether respondent favors accepting refugee passing gov screening
Y6_new	Binary variable for whether respondent will letter to next President of US supporting refugees
survey_neg	Binary variable (Backlash) for whether the respondent wrote a negative evaluation of the survey (1) or not

## Data cleaning

The original data is set up to reflect the YouGov data storage system, which requires further cleaning and arrangement before analysis. Below are pre-analysis cleaning steps.

### Conjoint variables

For variables on gender, Male is coded as 1 while Female is coded as 0; 8 codes for skipped. Note **Refugee1\_Attribute6** describes the country the refugee profile is from, and all refugees were designed to come from Syria.

The 1st pair of refugees are denoted by an ‘a’ after R1 or R2, 2nd pair of refugees are denoted by a ‘b’ after R1 or R2, 3rd pair are denoted by ‘c’ after R1 or R2.

```
#gender: 1=Male, 0=Female
data$R1a_sex<-data$Refugee1_Attribute1
data$R1a_sex[data$R1a_sex==2]<-0
data$R2a_sex<-data$Refugee2_Attribute1
data$R2a_sex[data$R2a_sex==2]<-0
#sex
data$R1b_sex<-data$Refugee1a_Attribute1
data$R1b_sex[data$R1b_sex==2]<-0
```

```

data$R2b_sex<-data$Refugee2a_Attribute1
data$R2b_sex[data$R2b_sex==2]<-0
data$R1c_sex<-data$Refugee1b_Attribute1
data$R1c_sex[data$R1c_sex==2]<-0
data$R2c_sex<-data$Refugee2b_Attribute1
data$R2c_sex[data$R2c_sex==2]<-0
#religion: 1=Muslim, 0=Christian
data$R1a_muslim<-data$Refugee1_Attribute2
data$R1a_muslim[data$R1a_muslim==1]<-0
data$R1a_muslim[data$R1a_muslim==2]<-1
data$R2a_muslim<-data$Refugee2_Attribute2
data$R2a_muslim[data$R2a_muslim==1]<-0
data$R2a_muslim[data$R2a_muslim==2]<-1
data$R1b_muslim<-data$Refugee1a_Attribute2
data$R1b_muslim[data$R1b_muslim==1]<-0
data$R1b_muslim[data$R1b_muslim==2]<-1
data$R2b_muslim<-data$Refugee2a_Attribute2
data$R2b_muslim[data$R2b_muslim==1]<-0
data$R2b_muslim[data$R2b_muslim==2]<-1
data$R1c_muslim<-data$Refugee1b_Attribute2
data$R1c_muslim[data$R1c_muslim==1]<-0
data$R1c_muslim[data$R1c_muslim==2]<-1
data$R2c_muslim<-data$Refugee2b_Attribute2
data$R2c_muslim[data$R2c_muslim==1]<-0
data$R2c_muslim[data$R2c_muslim==2]<-1
#profession: 1=Farmer, 2=Teacher, 3=Doctor
data$R1a_job<-data$Refugee1_Attribute3
data$R2a_job<-data$Refugee2_Attribute3
data$R1b_job<-data$Refugee1a_Attribute3
data$R2b_job<-data$Refugee2a_Attribute3
data$R1c_job<-data$Refugee1b_Attribute3
data$R2c_job<-data$Refugee2b_Attribute3
#language: 1=Fluent, 2=Broken, 3=None
data$R1a_english<-data$Refugee1_Attribute4
data$R2a_english<-data$Refugee2_Attribute4
data$R1b_english<-data$Refugee1a_Attribute4
data$R2b_english<-data$Refugee2a_Attribute4
data$R1c_english<-data$Refugee1b_Attribute4
data$R2c_english<-data$Refugee2b_Attribute4
#age: 1=20, 2=40, 3=60
data$R1a_age<-data$Refugee1_Attribute5
data$R2a_age<-data$Refugee2_Attribute5
data$R1b_age<-data$Refugee1a_Attribute5
data$R2b_age<-data$Refugee2a_Attribute5
data$R1c_age<-data$Refugee1b_Attribute5
data$R2c_age<-data$Refugee2b_Attribute5
# Number of Muslim profiles
data$num_muslim<-NA
data$num_muslim<-rowSums(data[, c("R1a_muslim","R2a_muslim","R1b_muslim","R2b_muslim","R1c_muslim","R2c_muslim")])
data$num_muslim<-scale(data$num_muslim)

```

## Respondent covariates

Retain immigrant, birthyr, race, educ, votereg (voter registration), newsint (political interest) variables. Create several different versions of variable.



```
data$info4<- data$S7# US admitted proportionally more/fewer refugees than Germany
```

## Ethnocentric questions

The original measure includes 24 items, each weighted equally. For eight items, each weighted equally with 5 points each, we will consider anyone scoring above 27 as high ethnocentric and anyone scoring below 17 as low ethnocentric, which is directly scaled from the original scoring scheme.

```
data$ethnocentric1<-rowSums(data[,c("S8_1","S8_2","S8_3","s8_4","S8_5","S8_6","S8_7","S8_8")])#raw ethnocen
data$ethnocentric2<-data$ethnocentric1 #high is >27, 27>=mid>=17, 17>low
data$ethnocentric2[data$ethnocentric1<17]<-0
data$ethnocentric2[data$ethnocentric1<=27 & data$ethnocentric1>=17]<-1
data$ethnocentric2[data$ethnocentric1>27]<-2
```

## Information treatment specific questions

SP1a asks the respondent if the information text is new information (note in data, this variable is called "Persuasion"). Yes is coded as a 1, No as a 0. SP1b asks respondent if they believe US resettled proportionally more, fewer or about the same refugees as other democracies such as Canada, France or Germany. More is coded as 1, Fewer as 2, and Same as 3.

```
data$persuasion_infnew<-data$SP1a
data$persuasion_infnew<-ifelse(data$persuasion_infnew==2,0,1)#recode as 1 if new, 0 otherwise.
```

## Outcome variables

Outcome variables include Y1, Y2, Y3, Y4, Y6. Y1-Y3 are collected several times for each respondent. Y4 and Y6 (as well as backlash) are collected once per respondent.

```
#Y1: refugee 1 or refugee 2?
#for refugee pair a
#`SC1` (Control)/`SE2` (Empathy)/`SP2` (Persuasion) is a variable that asks whether the respondent would pr
data$y1_a<-data$SC1
data$y1_a<-ifelse(is.na(data$y1_a)&(data$Treatment_Group==3|data$Treatment_Group==4),data$SE2,data$y1_a)
data$y1_a<-ifelse(is.na(data$y1_a)&(data$Treatment_Group==5|data$Treatment_Group==6),data$SP2,data$y1_a)
#recode into refugee1=0, refugee2=1
data$y1_a[data$y1_a==1]<-0
data$y1_a[data$y1_a==2]<-1
#for refugee pair b
#`SC1a` (Control)/`SE2a` (Empathy)/`SP2a` (Persuasion) is a variable that asks whether the respondent would
data$y1_b<-data$SC1
data$y1_b<-ifelse(is.na(data$y1_b)&(data$Treatment_Group==3|data$Treatment_Group==4),data$SE2a,data$y1_b)
data$y1_b<-ifelse(is.na(data$y1_b)&(data$Treatment_Group==5|data$Treatment_Group==6),data$SP2a,data$y1_b)
#recode into refugee1=0, refugee2=1
data$y1_b[data$y1_b==1]<-0
data$y1_b[data$y1_b==2]<-1
#for refugee pair c
#`SC1b` (Control)/`SE2b` (Empathy)/`SP2b` (Persuasion) is a variable that asks whether the respondent would
data$y1_c<-data$SC1
data$y1_c<-ifelse(is.na(data$y1_c)&(data$Treatment_Group==3|data$Treatment_Group==4),data$SE2b,data$y1_c)
data$y1_c<-ifelse(is.na(data$y1_c)&(data$Treatment_Group==5|data$Treatment_Group==6),data$SP2b,data$y1_c)
#recode into refugee1=0, refugee2=1
data$y1_c[data$y1_c==1]<-0
data$y1_c[data$y1_c==2]<-1
```

```

#Y2 (refugee 1)
#for refugee pair a
#`SC3` (Control)/`SE4` (Empathy)/`SP4` (Persuasion) is a variable that asks whether the respondent thinks t
data$y2_a<-data$SC3 #need to combine variables so that new variable takes on values
data$y2_a<-ifelse((data$Treatment_Group==3|data$Treatment_Group==4),data$SE4,data$y2_a)#3,4 are Empathy
data$y2_a<-ifelse((data$Treatment_Group==5|data$Treatment_Group==6),data$SP4,data$y2_a)#5,6 are Persuasion
#for refugee pair b
#`SC3a` (Control)/`SE4a` (Empathy)/`SP4a` (Persuasion) is a variable that asks whether the respondent think
data$y2_b<-data$SC3a #need to combine variables so that new variable takes on values
data$y2_b<-ifelse((data$Treatment_Group==3|data$Treatment_Group==4),data$SE4a,data$y2_b)
data$y2_b<-ifelse((data$Treatment_Group==5|data$Treatment_Group==6),data$SP4a,data$y2_b)
#for refugee pair c
#`SC3b` (Control)/`SE4b` (Empathy)/`SP4b` (Persuasion) is a variable that asks whether the respondent think
data$y2_c<-data$SC3b
data$y2_c<-ifelse((data$Treatment_Group==3|data$Treatment_Group==4),data$SE4b,data$y2_c)
data$y2_c<-ifelse((data$Treatment_Group==5|data$Treatment_Group==6),data$SP4b,data$y2_c)

#Y3 (refugee 2)
#`SC4` (Control)/`SE5` (Empathy)/`SP5` (Persuasion) is a variable that asks whether the respondent thinks t
data$y3_a<-data$SC4
data$y3_a<-ifelse((data$Treatment_Group==3|data$Treatment_Group==4),data$SE5,data$y3_a)
data$y3_a<-ifelse((data$Treatment_Group==5|data$Treatment_Group==6),data$SP5,data$y3_a)
#`SC4a` (Control)/`SE5a` (Empathy)/`SP5a` (Persuasion) is a variable that asks whether the respondent think
data$y3_b<-data$SC4a
data$y3_b<-ifelse((data$Treatment_Group==3|data$Treatment_Group==4),data$SE5a,data$y3_b)
data$y3_b<-ifelse((data$Treatment_Group==5|data$Treatment_Group==6),data$SP5a,data$y3_b)
#`SC4b` (Control)/`SE5b` (Empathy)/`SP5b` (Persuasion) is a variable that asks whether the respondent think
data$y3_c<-data$SC4b
data$y3_c<-ifelse((data$Treatment_Group==3|data$Treatment_Group==4),data$SE5b,data$y3_c)
data$y3_c<-ifelse((data$Treatment_Group==5|data$Treatment_Group==6),data$SP5b,data$y3_c)

#Y4
#`SC5` (Control)/`SE6` (Empathy)/`SP6` (Persuasion) is a variable that asks whether respondent favors/oppos
data$y4<-data$SC5
data$y4<-ifelse(is.na(data$y4)&(data$Treatment_Group==3|data$Treatment_Group==4),data$SE6,data$y4)
data$y4<-ifelse(is.na(data$y4)&(data$Treatment_Group==5|data$Treatment_Group==6),data$SP6,data$y4)
#recode into oppose=0, favor=1
data$y4[data$y4==2]<-0

#Y6
#`SC7a` (Control)/`SE8a` (Empathy)/`SP8a` (Persuasion) is a variable that asks if the respondent would be v
data$y6<-data$SC7a
data$y6<-ifelse(is.na(data$y6)&(data$Treatment_Group==3|data$Treatment_Group==4),data$SE8a,data$y6)
data$y6<-ifelse(is.na(data$y6)&(data$Treatment_Group==5|data$Treatment_Group==6),data$SP8a,data$y6)
#recode into oppose=0, favor=1
data$y6[data$y6==2]<-0

```

## Pew religion variables

## Demeaned covariates

This section de-means covariates we will be using in the regressions in the hypotheses section. These include sex, birthyr, birthcountry, educ, religpew, partyid3, and ethnocentric1.

## Treatment group variables

### Long version of data

We create different stacked versions of the data to look at differences in Y1, Y2, Y3 across refugee profile pairs within respondents. We also create subsets of the data with just respondents who received either Control or Persuasion, Control or Empathy treatments, and Empathy or Persuasion treatments. (Note again, here “Persuasion” is the Information treatment.) Y1 is used in the context of analyzing the choice a respondent in preferring a Muslim profile over a Christian profile when presented with the two, so first we must reduce the data to situations where the respondent is presented with such a pair, when conducting analyses on Y1.

Save the cleaned data.

```
save.image("cleandata.RData")
```

This is the end of the pre-analysis data prep.

## PAP Analysis

This section conducts the hypothesis tests specified in the Adida, Lo, Platas preanalysis plan.

We can start here with `cleandata.RData` if we like. Control variables include: gender, age, US born, education level, religion, party ID, and ethnocentrism as specified in our PAP.

```
rm(list=ls())
load("cleandata.RData")
#function for ols, calculating regression outputs with possibility for robust, clustered, robust-clustered
#from Mahmood Arai
clx <-function(fm, cluster=NULL){
  if(length(cluster)!=0){
    M <- length(unique(cluster))
    dfcw <- fm$df / (fm$df - (M -1))
    N <- length(cluster)
    dfc <- (M/(M-1))*((N-1)/(N-fm$rank))
    u <- apply(estfun(fm),2,
               function(x) tapply(x, cluster, sum))
    vcovCL <- dfc*sandwich(fm, meat=crossprod(u)/N)*dfcw
    coeftest(fm, vcovCL) }
  else{
    vcovR<-vcovHC(fm,sandwich=TRUE,type="HC")#heteroskedastic consistent cov matrix estimation, with White
    coeftest(fm,vcovR)
  }
}
#mahmood arai - just cluster
cl <- function(fm, dat,cluster){
  require(sandwich, quietly = TRUE)
  require(lmtest, quietly = TRUE)
  M <- length(unique(cluster))
  N <- length(cluster)
  K <- fm$rank
  dfc <- (M/(M-1))*((N-1)/(N-K))
  uj <- apply(estfun(fm),2, function(x) tapply(x, cluster, sum));
  vcovCL <- dfc*sandwich(fm, meat=crossprod(uj)/N)
  coeftest(fm, vcovCL) }
```

## Primary hypotheses: H1a - H4b

### H1a:

Respondents who receive the empathy prime will give higher admission scores (7 point scale) than those in the control group.

```
##
## t test of coefficients:
##
##               Estimate Std. Error t value Pr(>|t|)
## (Intercept)      5.342491   0.155702 34.3122 < 2.2e-16
## Empathy          -0.069692   0.215403 -0.3235 0.7462901
## sex              0.025165   0.055831  0.4507 0.6521948
## birthyr          0.069545   0.054916  1.2664 0.2053999
## immigrant2       -0.271542   0.120075 -2.2614 0.0237519
## educ             0.159080   0.056220  2.8296 0.0046691
## religpew2        -0.166805   0.172182 -0.9688 0.3326802
## religpew3        -0.023478   0.334102 -0.0703 0.9439795
## religpew4         0.601571   0.288517  2.0850 0.0370884
## religpew5         0.326796   0.282008  1.1588 0.2465567
## religpew6        -0.060493   0.370757 -0.1632 0.8703941
## religpew7         0.353742   0.398324  0.8881 0.3745188
## religpew8         1.929700   0.173928 11.0948 < 2.2e-16
## religpew9         0.347702   0.227496  1.5284 0.1264463
## religpew10        0.455735   0.218569  2.0851 0.0370850
## religpew11        0.036865   0.163838  0.2250 0.8219754
## religpew12        0.656995   0.243286  2.7005 0.0069342
## partyid3_namesIndependent -0.900436   0.130910 -6.8783 6.395e-12
## partyid3_namesNot Sure   -0.827434   0.238375 -3.4711 0.0005203
## partyid3_namesOther      0.669939   0.409197  1.6372 0.1016169
## partyid3_namesRepublican -1.170135   0.147207 -7.9489 2.070e-15
## ethnocentric1          -0.338140   0.075060 -4.5049 6.709e-06
## Empathy:sex           -0.017827   0.079312 -0.2248 0.8221650
## Empathy:birthyr        0.147463   0.078610  1.8759 0.0606991
## Empathy:immigrant2      0.099979   0.171237  0.5839 0.5593264
## Empathy:educ           0.025806   0.079604  0.3242 0.7458104
## Empathy:religpew2       0.235765   0.235206  1.0024 0.3161843
## Empathy:religpew3       0.207515   0.611154  0.3395 0.7342050
## Empathy:religpew4      -1.727104   0.866089 -1.9941 0.0461617
## Empathy:religpew5      -0.450895   0.461128 -0.9778 0.3281907
## Empathy:religpew6       0.390024   0.819007  0.4762 0.6339307
## Empathy:religpew7       0.657508   0.456837  1.4393 0.1501053
## Empathy:religpew8      -1.135308   0.456051 -2.4894 0.0128097
## Empathy:religpew9      -0.408101   0.330163 -1.2361 0.2164635
## Empathy:religpew10     -0.354986   0.312783 -1.1349 0.2564304
## Empathy:religpew11     -0.199988   0.232531 -0.8600 0.3897810
## Empathy:religpew12     -0.774949   0.336835 -2.3007 0.0214287
## Empathy:partyid3_namesIndependent 0.380942   0.182340  2.0892 0.0367143
## Empathy:partyid3_namesNot Sure   0.081509   0.351715  0.2317 0.8167385
## Empathy:partyid3_namesOther    -2.049057   1.684131 -1.2167 0.2237508
## Empathy:partyid3_namesRepublican -0.072680   0.215308 -0.3376 0.7356980
## Empathy:ethnocentric1          -0.031580   0.101214 -0.3120 0.7550399
##
## (Intercept)          ***
## Empathy
## sex
```

```

## birthyr
## immigrant2      *
## educ            **
## religpew2
## religpew3
## religpew4      *
## religpew5
## religpew6
## religpew7
## religpew8      ***
## religpew9
## religpew10     *
## religpew11
## religpew12     **
## partyid3_namesIndependent ***
## partyid3_namesNot Sure ***
## partyid3_namesOther
## partyid3_namesRepublican ***
## ethnocentric1 ***
## Empathy:sex
## Empathy:birthyr .
## Empathy:immigrant2
## Empathy:educ
## Empathy:religpew2
## Empathy:religpew3
## Empathy:religpew4 *
## Empathy:religpew5
## Empathy:religpew6
## Empathy:religpew7
## Empathy:religpew8 *
## Empathy:religpew9
## Empathy:religpew10
## Empathy:religpew11
## Empathy:religpew12 *
## Empathy:partyid3_namesIndependent *
## Empathy:partyid3_namesNot Sure
## Empathy:partyid3_namesOther
## Empathy:partyid3_namesRepublican
## Empathy:ethnocentric1
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

##
## t test of coefficients:
##
##               Estimate Std. Error t value Pr(>|t|)
## (Intercept)    5.5745433  0.2301359  24.2228 < 2.2e-16
## Empathy       -0.4679781  0.2990213  -1.5650  0.117605
## sex           0.0559628  0.0719096   0.7782  0.436446
## birthyr       0.0733330  0.0734765   0.9980  0.318280
## immigrant2    -0.3759263  0.1645995  -2.2839  0.022398
## educ          0.1149444  0.0701493   1.6386  0.101333
## religpew2     -0.2032724  0.2387071  -0.8516  0.394480
## religpew3     -0.4330252  0.4820478  -0.8983  0.369044
## religpew4      0.5502010  0.3315435   1.6595  0.097041
## religpew5      0.2743345  0.2866451   0.9571  0.338562
## religpew6     -0.0122865  0.5694330  -0.0216  0.982786

```



## religpew7	0.3301181	0.3686817	0.8954	0.370593
## religpew8	1.9002483	0.2436368	7.7995	6.790e-15
## religpew9	0.1392791	0.3150497	0.4421	0.658436
## religpew10	0.2874129	0.2921788	0.9837	0.325291
## religpew11	-0.1713517	0.2183617	-0.7847	0.432638
## religpew12	0.7401721	0.3065067	2.4149	0.015758
## partyid3_namesIndependent	-1.0907396	0.1809831	-6.0267	1.728e-09
## partyid3_namesNot Sure	-0.4874918	0.3256495	-1.4970	0.134427
## partyid3_namesOther	0.3307469	0.3489798	0.9478	0.343276
## partyid3_namesRepublican	-1.2618506	0.1824456	-6.9163	4.899e-12
## ethnocentric1	-0.3179628	0.0902624	-3.5226	0.000429
## Empathy:sex	-0.1411056	0.1044130	-1.3514	0.176590
## Empathy:birthyr	0.1065808	0.1033917	1.0308	0.302636
## Empathy:immigrant2	0.4256603	0.2233001	1.9062	0.056648
## Empathy:educ	0.0634736	0.0970109	0.6543	0.512937
## Empathy:religpew2	0.2603279	0.3152809	0.8257	0.408992
## Empathy:religpew3	0.8913800	0.6942467	1.2840	0.199186
## Empathy:religpew4	-0.4664798	1.0811221	-0.4315	0.666130
## Empathy:religpew5	-0.0822183	0.5323338	-0.1544	0.877259
## Empathy:religpew6	-0.9202582	1.3615510	-0.6759	0.499125
## Empathy:religpew7	0.8890981	0.4363195	2.0377	0.041602
## Empathy:religpew8	-1.0126338	0.4826961	-2.0979	0.035940
## Empathy:religpew9	-0.1339990	0.4413138	-0.3036	0.761411
## Empathy:religpew10	-0.2070432	0.3984383	-0.5196	0.603327
## Empathy:religpew11	0.1174917	0.3250430	0.3615	0.717759
## Empathy:religpew12	-1.0158970	0.4629480	-2.1944	0.028227
## Empathy:partyid3_namesIndependent	0.6889859	0.2427592	2.8381	0.004546
## Empathy:partyid3_namesNot Sure	-0.3218967	0.4974541	-0.6471	0.517589
## Empathy:partyid3_namesOther	-1.1171143	1.7680444	-0.6318	0.527507
## Empathy:partyid3_namesRepublican	0.0960791	0.2735091	0.3513	0.725383
## Empathy:ethnocentric1	0.0028958	0.1301793	0.0222	0.982253
##				
## (Intercept)	***			
## Empathy				
## sex				
## birthyr				
## immigrant2	*			
## educ				
## religpew2				
## religpew3				
## religpew4	.			
## religpew5				
## religpew6				
## religpew7				
## religpew8	***			
## religpew9				
## religpew10				
## religpew11				
## religpew12	*			
## partyid3_namesIndependent	***			
## partyid3_namesNot Sure				
## partyid3_namesOther				
## partyid3_namesRepublican	***			
## ethnocentric1	***			
## Empathy:sex				
## Empathy:birthyr				
## Empathy:immigrant2	.			

```

## Empathy:educ
## Empathy:religpew2
## Empathy:religpew3
## Empathy:religpew4
## Empathy:religpew5
## Empathy:religpew6
## Empathy:religpew7      *
## Empathy:religpew8      *
## Empathy:religpew9
## Empathy:religpew10
## Empathy:religpew11
## Empathy:religpew12      *
## Empathy:partyid3_namesIndependent **
## Empathy:partyid3_namesNot Sure
## Empathy:partyid3_namesOther
## Empathy:partyid3_namesRepublican
## Empathy:ethnocentric1
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

No statistically significant effect of Empathy on Y2.

### H1b:

Respondents who receive the persuasion prime will give higher admission scores (7 point scale) than those in the control group.

```

##
## t test of coefficients:
##
##               Estimate Std. Error t value
## (Intercept)      5.3424914  0.1556935 34.3142
## Persuasion      -0.1446732  0.2170435 -0.6666
## sex              0.0251646  0.0558278  0.4508
## birthyr          0.0695449  0.0549127  1.2665
## immigrant2      -0.2715419  0.1200681 -2.2616
## educ             0.1590799  0.0562165  2.8298
## religpew2       -0.1668050  0.1721721 -0.9688
## religpew3       -0.0234776  0.3340832 -0.0703
## religpew4        0.6015712  0.2885005  2.0852
## religpew5        0.3267956  0.2819924  1.1589
## religpew6       -0.0604934  0.3707361 -0.1632
## religpew7        0.3537424  0.3983015  0.8881
## religpew8        1.9296997  0.1739188 11.0954
## religpew9        0.3477021  0.2274836  1.5285
## religpew10       0.4557349  0.2185566  2.0852
## religpew11       0.0368653  0.1638292  0.2250
## religpew12       0.6569949  0.2432721  2.7007
## partyid3_namesIndependent -0.9004356  0.1309031 -6.8786
## partyid3_namesNot Sure -0.8274341  0.2383614 -3.4713
## partyid3_namesOther    0.6699393  0.4091742  1.6373
## partyid3_namesRepublican -1.1701354  0.1471989 -7.9493
## ethnocentric1     -0.3381395  0.0750555 -4.5052
## Persuasion:sex      -0.0223383  0.0795580 -0.2808
## Persuasion:birthyr    0.1630889  0.0751474  2.1703
## Persuasion:immigrant2  0.1181754  0.1710497  0.6909
## Persuasion:educ      -0.0208080  0.0797583 -0.2609

```

## Persuasion:religpew2	0.2761774	0.2388746	1.1562
## Persuasion:religpew3	0.4755923	0.5939803	0.8007
## Persuasion:religpew4	0.0627853	0.6085396	0.1032
## Persuasion:religpew5	-0.3458219	0.4567647	-0.7571
## Persuasion:religpew6	0.8881371	0.7024622	1.2643
## Persuasion:religpew7	0.5294197	0.5284267	1.0019
## Persuasion:religpew9	0.2265236	0.3116771	0.7268
## Persuasion:religpew10	-0.1079104	0.3176517	-0.3397
## Persuasion:religpew11	-0.1257153	0.2345460	-0.5360
## Persuasion:religpew12	-0.6115192	0.3812944	-1.6038
## Persuasion:partyid3_namesIndependent	0.0095755	0.1887428	0.0507
## Persuasion:partyid3_namesNot Sure	-0.0263460	0.3627851	-0.0726
## Persuasion:partyid3_namesOther	-1.7637065	0.6063070	-2.9089
## Persuasion:partyid3_namesRepublican	-0.2455945	0.2128466	-1.1539
## Persuasion:ethnocentric1	0.0123537	0.1041964	0.1186
##	Pr(> t )		
## (Intercept)	< 2.2e-16	***	
## Persuasion	0.5050654		
## sex	0.6521767		
## birthyr	0.2053746		
## immigrant2	0.0237441	*	
## educ	0.0046668	**	
## religpew2	0.3326532		
## religpew3	0.9439764		
## religpew4	0.0370778	*	
## religpew5	0.2465304		
## religpew6	0.8703869		
## religpew7	0.3744922		
## religpew8	< 2.2e-16	***	
## religpew9	0.1264251		
## religpew10	0.0370744	*	
## religpew11	0.8219656		
## religpew12	0.0069311	**	
## partyid3_namesIndependent	6.378e-12	***	
## partyid3_namesNot Sure	0.0005199	***	
## partyid3_namesOther	0.1015978		
## partyid3_namesRepublican	2.063e-15	***	
## ethnocentric1	6.701e-06	***	
## Persuasion:sex	0.7788846		
## Persuasion:birthyr	0.0300095	*	
## Persuasion:immigrant2	0.4896538		
## Persuasion:educ	0.7941842		
## Persuasion:religpew2	0.2476410		
## Persuasion:religpew3	0.4233306		
## Persuasion:religpew4	0.9178270		
## Persuasion:religpew5	0.4489995		
## Persuasion:religpew6	0.2061425		
## Persuasion:religpew7	0.3164245		
## Persuasion:religpew9	0.4673707		
## Persuasion:religpew10	0.7340793		
## Persuasion:religpew11	0.5919736		
## Persuasion:religpew12	0.1087879		
## Persuasion:partyid3_namesIndependent	0.9595392		
## Persuasion:partyid3_namesNot Sure	0.9421087		
## Persuasion:partyid3_namesOther	0.0036341	**	
## Persuasion:partyid3_namesRepublican	0.2485846		
## Persuasion:ethnocentric1	0.9056245		

```

## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

##
## t test of coefficients:
##
##
##               Estimate Std. Error t value
## (Intercept)      5.574543   0.230123 24.2242
## Persuasion      -0.531909   0.294075 -1.8088
## sex              0.055963   0.071906  0.7783
## birthyr         0.073333   0.073472  0.9981
## immigrant2      -0.375926   0.164590 -2.2840
## educ            0.114944   0.070145  1.6387
## religpew2       -0.203272   0.238694 -0.8516
## religpew3       -0.433025   0.482021 -0.8984
## religpew4        0.550201   0.331525  1.6596
## religpew5        0.274334   0.286629  0.9571
## religpew6       -0.012287   0.569401 -0.0216
## religpew7        0.330118   0.368661  0.8955
## religpew8        1.900248   0.243623  7.7999
## religpew9        0.139279   0.315032  0.4421
## religpew10       0.287413   0.292162  0.9837
## religpew11      -0.171352   0.218349 -0.7848
## religpew12       0.740172   0.306490  2.4150
## partyid3_namesIndependent -1.090740   0.180973 -6.0271
## partyid3_namesNot Sure   -0.487492   0.325631 -1.4971
## partyid3_namesOther      0.330747   0.348960  0.9478
## partyid3_namesRepublican -1.261851   0.182435 -6.9167
## ethnocentric1      -0.317963   0.090257 -3.5228
## Persuasion:sex      -0.064223   0.102247 -0.6281
## Persuasion:birthyr    0.144063   0.097369  1.4796
## Persuasion:immigrant2  0.294668   0.225231  1.3083
## Persuasion:educ      0.079117   0.095794  0.8259
## Persuasion:religpew2   0.428539   0.316162  1.3554
## Persuasion:religpew3   1.161864   0.790248  1.4703
## Persuasion:religpew4  -0.197165   0.678226 -0.2907
## Persuasion:religpew5  -0.437361   0.527060 -0.8298
## Persuasion:religpew6   0.925932   0.790901  1.1707
## Persuasion:religpew7   0.792103   0.485794  1.6305
## Persuasion:religpew9   0.729439   0.382411  1.9075
## Persuasion:religpew10  0.235126   0.487933  0.4819
## Persuasion:religpew11  0.110015   0.304609  0.3612
## Persuasion:religpew12  0.034481   0.462351  0.0746
## Persuasion:partyid3_namesIndependent 0.238993   0.251258  0.9512
## Persuasion:partyid3_namesNot Sure   -0.269310   0.482919 -0.5577
## Persuasion:partyid3_namesOther    -1.392763   0.524854 -2.6536
## Persuasion:partyid3_namesRepublican -0.068230   0.255533 -0.2670
## Persuasion:ethnocentric1  0.107876   0.129407  0.8336
##
##               Pr(>|t|)
## (Intercept)    < 2.2e-16 ***
## Persuasion      0.0705171 .
## sex            0.4364202
## birthyr        0.3182526
## immigrant2     0.0223902 *
## educ           0.1013135
## religpew2      0.3944533
## religpew3      0.3690172

```

```

## religpew4          0.0970228 .
## religpew5          0.3385351
## religpew6          0.9827850
## religpew7          0.3705659
## religpew8          6.766e-15 ***
## religpew9          0.6584180
## religpew10         0.3252638
## religpew11         0.4326123
## religpew12         0.0157518 *
## partyid3_namesIndependent 1.724e-09 ***
## partyid3_namesNot Sure 0.1344052
## partyid3_namesOther 0.3432492
## partyid3_namesRepublican 4.885e-12 ***
## ethnocentric1      0.0004287 ***
## Persuasion:sex     0.5299419
## Persuasion:birthyr 0.1390226
## Persuasion:immigrant2 0.1908030
## Persuasion:educ    0.4088720
## Persuasion:religpew2 0.1753055
## Persuasion:religpew3 0.1415226
## Persuasion:religpew4 0.7712817
## Persuasion:religpew5 0.4066638
## Persuasion:religpew6 0.2417332
## Persuasion:religpew7 0.1030184
## Persuasion:religpew9 0.0564854 .
## Persuasion:religpew10 0.6298996
## Persuasion:religpew11 0.7179813
## Persuasion:religpew12 0.9405530
## Persuasion:partyid3_namesIndependent 0.3415319
## Persuasion:partyid3_namesNot Sure 0.5770804
## Persuasion:partyid3_namesOther 0.0079750 **
## Persuasion:partyid3_namesRepublican 0.7894657
## Persuasion:ethnocentric1 0.4045125
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

No statistically significant effect of persuasion on Y2; with weights however there is a slightly negative of persuasion on Y2: -0.531909, with pvalue=0.0705171. This doesn't pass the Bonferonni multiple comparisons test (which requires passing  $0.05/8=0.00625$  pvalue).

## H2a: (Empathy effect: letter)

Respondents receiving the empathy prime will be more likely than those in the control group to send an anonymous letter to the next President of the U.S. in support of resettling refugees.

```

##
## t test of coefficients:
##
##               Estimate Std. Error t value Pr(>|t|)
## (Intercept)    0.1616726  0.0330859  4.8865 1.120e-06
## Empathy        0.1861761  0.0490521  3.7955 0.0001524
## sex            0.0104277  0.0119916  0.8696 0.3846465
## birthyr       -0.0203018  0.0124499 -1.6307 0.1031358
## immigrant2     -0.0018712  0.0259055 -0.0722 0.9424256
## educ           0.0664338  0.0133496  4.9765 7.109e-07
## religpew2      0.0815543  0.0342484  2.3813 0.0173597
## religpew3      0.0178092  0.0689007  0.2585 0.7960697

```

## religpew4	0.0523919	0.1048293	0.4998	0.6172906
## religpew5	0.1215894	0.0859958	1.4139	0.1575685
## religpew6	-0.0329157	0.0572162	-0.5753	0.5651711
## religpew7	0.1273038	0.1543590	0.8247	0.4096393
## religpew8	-0.0700216	0.0310291	-2.2566	0.0241529
## religpew9	0.1345114	0.0620412	2.1681	0.0302849
## religpew10	0.1449544	0.0545298	2.6583	0.0079258
## religpew11	0.0303854	0.0302881	1.0032	0.3158979
## religpew12	0.1271551	0.0599481	2.1211	0.0340541
## partyid3_namesIndependent	-0.0196249	0.0312989	-0.6270	0.5307290
## partyid3_namesNot Sure	-0.0827306	0.0387170	-2.1368	0.0327519
## partyid3_namesOther	-0.2087477	0.0536447	-3.8913	0.0001034
## partyid3_namesRepublican	-0.1348230	0.0271496	-4.9659	7.500e-07
## ethnocentric1	-0.0595751	0.0119239	-4.9963	6.425e-07
## Empathy:sex	-0.0198122	0.0176618	-1.1218	0.2621215
## Empathy:birthyr	0.0255467	0.0186254	1.3716	0.1703615
## Empathy:immigrant2	-0.0569662	0.0379690	-1.5003	0.1337073
## Empathy:educ	-0.0421796	0.0191929	-2.1977	0.0281025
## Empathy:religpew2	-0.1034190	0.0485392	-2.1306	0.0332583
## Empathy:religpew3	0.1051420	0.1495325	0.7031	0.4820628
## Empathy:religpew4	-0.2053398	0.1144894	-1.7935	0.0730607
## Empathy:religpew5	-0.0165782	0.1273826	-0.1301	0.8964664
## Empathy:religpew6	0.0012957	0.1447836	0.0089	0.9928605
## Empathy:religpew7	0.1357664	0.2180170	0.6227	0.5335407
## Empathy:religpew8	0.2278384	0.2995814	0.7605	0.4470443
## Empathy:religpew9	0.0372005	0.0906432	0.4104	0.6815584
## Empathy:religpew10	-0.1017924	0.0850621	-1.1967	0.2315913
## Empathy:religpew11	-0.0654831	0.0464876	-1.4086	0.1591262
## Empathy:religpew12	-0.0411236	0.0841324	-0.4888	0.6250470
## Empathy:partyid3_namesIndependent	-0.1142824	0.0455344	-2.5098	0.0121691
## Empathy:partyid3_namesNot Sure	-0.1361780	0.0631218	-2.1574	0.0311109
## Empathy:partyid3_namesOther	0.3225680	0.3021815	1.0675	0.2859088
## Empathy:partyid3_namesRepublican	-0.0690863	0.0417854	-1.6534	0.0984362
## Empathy:ethnocentric1	-0.0278526	0.0181118	-1.5378	0.1242743
##				
## (Intercept)	***			
## Empathy	***			
## sex				
## birthyr				
## immigrant2				
## educ	***			
## religpew2	*			
## religpew3				
## religpew4				
## religpew5				
## religpew6				
## religpew7				
## religpew8	*			
## religpew9	*			
## religpew10	**			
## religpew11				
## religpew12	*			
## partyid3_namesIndependent				
## partyid3_namesNot Sure	*			
## partyid3_namesOther	***			
## partyid3_namesRepublican	***			
## ethnocentric1	***			

```

## Empathy:sex
## Empathy:birthyr
## Empathy:immigrant2
## Empathy:educ *
## Empathy:religpew2 *
## Empathy:religpew3
## Empathy:religpew4 .
## Empathy:religpew5
## Empathy:religpew6
## Empathy:religpew7
## Empathy:religpew8
## Empathy:religpew9
## Empathy:religpew10
## Empathy:religpew11
## Empathy:religpew12
## Empathy:partyid3_namesIndependent *
## Empathy:partyid3_namesNot Sure *
## Empathy:partyid3_namesOther
## Empathy:partyid3_namesRepublican .
## Empathy:ethnocentric1
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

##
## t test of coefficients:
##
##
##               Estimate Std. Error t value Pr(>|t|)
## (Intercept)      0.1519913   0.0360279   4.2187 2.582e-05
## Empathy           0.1424016   0.0565431   2.5185 0.011875
## sex              0.0030991   0.0151157   0.2050 0.837576
## birthyr          -0.0184167   0.0159795  -1.1525 0.249264
## immigrant2        0.0222696   0.0304145   0.7322 0.464141
## educ             0.0640497   0.0146946   4.3587 1.384e-05
## religpew2         0.1344210   0.0453979   2.9610 0.003108
## religpew3         0.0520027   0.0980622   0.5303 0.595969
## religpew4         0.1005414   0.1192568   0.8431 0.399306
## religpew5         0.1524394   0.0936811   1.6272 0.103870
## religpew6        -0.0270364   0.0500643  -0.5400 0.589243
## religpew7         0.0858293   0.1249810   0.6867 0.492338
## religpew8        -0.0433314   0.0377397  -1.1482 0.251056
## religpew9         0.1292752   0.0691171   1.8704 0.061597
## religpew10        0.1420860   0.0571350   2.4868 0.012980
## religpew11        0.0664226   0.0398199   1.6681 0.095479
## religpew12        0.1684463   0.0990955   1.6998 0.089338
## partyid3_namesIndependent -0.0451808   0.0427726  -1.0563 0.290975
## partyid3_namesNot Sure -0.1061719   0.0480390  -2.2101 0.027225
## partyid3_namesOther -0.2406893   0.0601086  -4.0042 6.481e-05
## partyid3_namesRepublican -0.1736103   0.0367590  -4.7229 2.509e-06
## ethnocentric1    -0.0427666   0.0138858  -3.0799 0.002103
## Empathy:sex      -0.0156333   0.0224492  -0.6964 0.486280
## Empathy:birthyr   0.0158958   0.0244781   0.6494 0.516171
## Empathy:immigrant2 -0.0500102   0.0461578  -1.0835 0.278752
## Empathy:educ     -0.0324998   0.0224747  -1.4461 0.148337
## Empathy:religpew2 -0.1505180   0.0622940  -2.4163 0.015782
## Empathy:religpew3   0.1007248   0.1781494   0.5654 0.571877
## Empathy:religpew4 -0.2452210   0.1317530  -1.8612 0.062880
## Empathy:religpew5 -0.0568763   0.1329625  -0.4278 0.668877

```

```

## Empathy:religpew6          -0.0862156  0.1054682 -0.8175  0.413779
## Empathy:religpew7          0.2690904  0.1802227  1.4931  0.135591
## Empathy:religpew8          0.2372063  0.3164420  0.7496  0.453593
## Empathy:religpew9          0.0958366  0.1170950  0.8185  0.413210
## Empathy:religpew10         -0.0749092  0.0909320 -0.8238  0.410168
## Empathy:religpew11         -0.0965331  0.0604612 -1.5966  0.110532
## Empathy:religpew12         -0.0991985  0.1232118 -0.8051  0.420868
## Empathy:partyid3_namesIndependent -0.0308343  0.0586801 -0.5255  0.599327
## Empathy:partyid3_namesNot Sure -0.0455205  0.0699884 -0.6504  0.515519
## Empathy:partyid3_namesOther   0.4606632  0.3204808  1.4374  0.150779
## Empathy:partyid3_namesRepublican 0.0108588  0.0529462  0.2051  0.837525
## Empathy:ethnocentric1        -0.0428561  0.0229660 -1.8661  0.062198
##
## (Intercept)                ***
## Empathy                     *
## sex
## birthyr
## immigrant2
## educ                        ***
## religpew2                   **
## religpew3
## religpew4
## religpew5
## religpew6
## religpew7
## religpew8
## religpew9                   .
## religpew10                  *
## religpew11                  .
## religpew12                  .
## partyid3_namesIndependent
## partyid3_namesNot Sure      *
## partyid3_namesOther         ***
## partyid3_namesRepublican    ***
## ethnocentric1               **
## Empathy:sex
## Empathy:birthyr
## Empathy:immigrant2
## Empathy:educ
## Empathy:religpew2           *
## Empathy:religpew3
## Empathy:religpew4           .
## Empathy:religpew5
## Empathy:religpew6
## Empathy:religpew7
## Empathy:religpew8
## Empathy:religpew9
## Empathy:religpew10
## Empathy:religpew11
## Empathy:religpew12
## Empathy:partyid3_namesIndependent
## Empathy:partyid3_namesNot Sure
## Empathy:partyid3_namesOther
## Empathy:partyid3_namesRepublican
## Empathy:ethnocentric1      .
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```



Empathy effect without weights: 0.1861761, pvalue=0.0001524. This passes the Bonferonni multiple hypothesis corrections pvalue of 0.00625.

## H2b: (Persuasion effect: letter)

Respondents receiving the persuasion prime will be more likely than those in the control group to send an anonymous letter to the next President of the U.S. in support of resettling refugees.

```
##
## t test of coefficients:
##
##               Estimate Std. Error t value
## (Intercept)      0.16167258  0.03308586  4.8865
## Persuasion        0.05635772  0.04703949  1.1981
## sex              0.01042774  0.01199164  0.8696
## birthyr        -0.02030180  0.01244985 -1.6307
## immigrant2      -0.00187120  0.02590547 -0.0722
## educ            0.06643384  0.01334963  4.9765
## religpew2       0.08155427  0.03424845  2.3813
## religpew3       0.01780919  0.06890072  0.2585
## religpew4       0.05239186  0.10482925  0.4998
## religpew5       0.12158939  0.08599578  1.4139
## religpew6      -0.03291573  0.05721624 -0.5753
## religpew7       0.12730381  0.15435901  0.8247
## religpew8      -0.07002157  0.03102911 -2.2566
## religpew9       0.13451144  0.06204118  2.1681
## religpew10      0.14495436  0.05452983  2.6583
## religpew11      0.03038536  0.03028815  1.0032
## religpew12      0.12715505  0.05994806  2.1211
## partyid3_namesIndependent -0.01962494  0.03129886 -0.6270
## partyid3_namesNot Sure  -0.08273062  0.03871704 -2.1368
## partyid3_namesOther    -0.20874766  0.05364474 -3.8913
## partyid3_namesRepublican -0.13482295  0.02714962 -4.9659
## ethnocentric1      -0.05957514  0.01192385 -4.9963
## Persuasion:sex      -0.00680711  0.01719681 -0.3958
## Persuasion:birthyr   0.03675022  0.01749149  2.1010
## Persuasion:immigrant2  0.03036448  0.03701723  0.8203
## Persuasion:educ     -0.01824763  0.01866233 -0.9778
## Persuasion:religpew2 -0.08330470  0.04837300 -1.7221
## Persuasion:religpew3  0.04163635  0.16159869  0.2577
## Persuasion:religpew4 -0.10695694  0.16425336 -0.6512
## Persuasion:religpew5 -0.12707418  0.11232385 -1.1313
## Persuasion:religpew6 -0.03711872  0.10006114 -0.3710
## Persuasion:religpew7  0.05777950  0.19734197  0.2928
## Persuasion:religpew9 -0.06740279  0.08470420 -0.7957
## Persuasion:religpew10 -0.12010810  0.08269898 -1.4524
## Persuasion:religpew11 -0.06356572  0.04385851 -1.4493
## Persuasion:religpew12 -0.03611766  0.08792546 -0.4108
## Persuasion:partyid3_namesIndependent -0.07937493  0.04353175 -1.8234
## Persuasion:partyid3_namesNot Sure  -0.05427569  0.05918503 -0.9171
## Persuasion:partyid3_namesOther    0.11307469  0.12312401  0.9184
## Persuasion:partyid3_namesRepublican -0.02391951  0.03883851 -0.6159
## Persuasion:ethnocentric1 -0.00030604  0.01672988 -0.0183
##               Pr(>|t|)
## (Intercept)      1.120e-06 ***
## Persuasion        0.2310419
## sex              0.3846465
```

```

## birthyr 0.1031357
## immigrant2 0.9424256
## educ 7.109e-07 ***
## religpew2 0.0173596 *
## religpew3 0.7960697
## religpew4 0.6172905
## religpew5 0.1575684
## religpew6 0.5651711
## religpew7 0.4096393
## religpew8 0.0241528 *
## religpew9 0.0302848 *
## religpew10 0.0079257 **
## religpew11 0.3158978
## religpew12 0.0340540 *
## partyid3_namesIndependent 0.5307289
## partyid3_namesNot Sure 0.0327518 *
## partyid3_namesOther 0.0001034 ***
## partyid3_namesRepublican 7.500e-07 ***
## ethnocentric1 6.424e-07 ***
## Persuasion:sex 0.6922742
## Persuasion:birthyr 0.0357800 *
## Persuasion:immigrant2 0.4121679
## Persuasion:educ 0.3283182
## Persuasion:religpew2 0.0852214 .
## Persuasion:religpew3 0.7967050
## Persuasion:religpew4 0.5150215
## Persuasion:religpew5 0.2580748
## Persuasion:religpew6 0.7107117
## Persuasion:religpew7 0.7697182
## Persuasion:religpew9 0.4262887
## Persuasion:religpew10 0.1465819
## Persuasion:religpew11 0.1474220
## Persuasion:religpew12 0.6812869
## Persuasion:partyid3_namesIndependent 0.0684154 .
## Persuasion:partyid3_namesNot Sure 0.3592416
## Persuasion:partyid3_namesOther 0.3585456
## Persuasion:partyid3_namesRepublican 0.5380593
## Persuasion:ethnocentric1 0.9854072
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

##
## t test of coefficients:
##
##               Estimate Std. Error t value
## (Intercept)  0.1519913  0.0360279  4.2187
## Persuasion    0.0071925  0.0496184  0.1450
## sex          0.0030991  0.0151157  0.2050
## birthyr     -0.0184167  0.0159795 -1.1525
## immigrant2   0.0222696  0.0304145  0.7322
## educ         0.0640497  0.0146946  4.3587
## religpew2    0.1344210  0.0453979  2.9610
## religpew3    0.0520027  0.0980622  0.5303
## religpew4    0.1005414  0.1192568  0.8431
## religpew5    0.1524394  0.0936811  1.6272
## religpew6   -0.0270364  0.0500643 -0.5400
## religpew7    0.0858293  0.1249810  0.6867

```

## religpew8	-0.0433314	0.0377397	-1.1482
## religpew9	0.1292752	0.0691171	1.8704
## religpew10	0.1420860	0.0571350	2.4868
## religpew11	0.0664226	0.0398199	1.6681
## religpew12	0.1684463	0.0990955	1.6998
## partyid3_namesIndependent	-0.0451808	0.0427726	-1.0563
## partyid3_namesNot Sure	-0.1061719	0.0480390	-2.2101
## partyid3_namesOther	-0.2406893	0.0601086	-4.0042
## partyid3_namesRepublican	-0.1736103	0.0367590	-4.7229
## ethnocentric1	-0.0427666	0.0138858	-3.0799
## Persuasion:sex	-0.0069668	0.0201297	-0.3461
## Persuasion:birthyr	0.0216926	0.0211657	1.0249
## Persuasion:immigrant2	0.0126466	0.0431505	0.2931
## Persuasion:educ	-0.0113334	0.0203554	-0.5568
## Persuasion:religpew2	-0.1076328	0.0623129	-1.7273
## Persuasion:religpew3	-0.0696322	0.1458573	-0.4774
## Persuasion:religpew4	-0.1790387	0.1566426	-1.1430
## Persuasion:religpew5	-0.2061985	0.1079268	-1.9105
## Persuasion:religpew6	0.0164345	0.0951488	0.1727
## Persuasion:religpew7	0.0263007	0.1776760	0.1480
## Persuasion:religpew9	-0.0654567	0.0929311	-0.7044
## Persuasion:religpew10	-0.0336149	0.0997528	-0.3370
## Persuasion:religpew11	-0.1151327	0.0489405	-2.3525
## Persuasion:religpew12	-0.0179566	0.1256600	-0.1429
## Persuasion:partyid3_namesIndependent	-0.0027738	0.0548732	-0.0505
## Persuasion:partyid3_namesNot Sure	-0.0136986	0.0588850	-0.2326
## Persuasion:partyid3_namesOther	0.1508695	0.0992324	1.5204
## Persuasion:partyid3_namesRepublican	0.0570082	0.0478698	1.1909
## Persuasion:ethnocentric1	-0.0175764	0.0187977	-0.9350
##	Pr(> t )		
## (Intercept)	2.582e-05	***	
## Persuasion	0.884763		
## sex	0.837576		
## birthyr	0.249264		
## immigrant2	0.464141		
## educ	1.384e-05	***	
## religpew2	0.003108	**	
## religpew3	0.595969		
## religpew4	0.399306		
## religpew5	0.103870		
## religpew6	0.589243		
## religpew7	0.492338		
## religpew8	0.251056		
## religpew9	0.061597	.	
## religpew10	0.012980	*	
## religpew11	0.095479	.	
## religpew12	0.089338	.	
## partyid3_namesIndependent	0.290975		
## partyid3_namesNot Sure	0.027225	*	
## partyid3_namesOther	6.481e-05	***	
## partyid3_namesRepublican	2.509e-06	***	
## ethnocentric1	0.002103	**	
## Persuasion:sex	0.729311		
## Persuasion:birthyr	0.305554		
## Persuasion:immigrant2	0.769494		
## Persuasion:educ	0.577750		
## Persuasion:religpew2	0.084290	.	

```

## Persuasion:religpew3          0.633137
## Persuasion:religpew4          0.253204
## Persuasion:religpew5          0.056226 .
## Persuasion:religpew6          0.862888
## Persuasion:religpew7          0.882339
## Persuasion:religpew9          0.481304
## Persuasion:religpew10         0.736171
## Persuasion:religpew11         0.018757 *
## Persuasion:religpew12         0.886387
## Persuasion:partyid3_namesIndependent 0.959691
## Persuasion:partyid3_namesNot Sure 0.816073
## Persuasion:partyid3_namesOther 0.128599
## Persuasion:partyid3_namesRepublican 0.233854
## Persuasion:ethnocentric1      0.349902
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

No statistically significant effect of persuasion on Y6.

### H3a: (Long term empathy effect: score)

The empathy prime effect on improving scores given to refugee profiles may degrade over time, but will persist. We use the `ControlEmpathy.data.y2` dataset, restricted to only individuals who answered the dependent variable questions in Wave 2 (`Treatment_Group==2` or `Treatment_Group==4`).

```

##
## t test of coefficients:
##
##               Estimate Std. Error t value Pr(>|t|)
## (Intercept)      5.0599005  0.1479781 34.1936 < 2.2e-16
## Empathy           0.0021346  0.1804484  0.0118 0.9905621
## sex              -0.0495446  0.0565777 -0.8757 0.3812169
## birthyr           0.0292756  0.0615730  0.4755 0.6344673
## immigrant2       -0.1834833  0.0882775 -2.0785 0.0376884
## educ              0.1610934  0.0558631  2.8837 0.0039379
## religpew2        -0.1103303  0.1601612 -0.6889 0.4909197
## religpew3         0.0825321  0.3982781  0.2072 0.8358401
## religpew4         0.1570393  0.6521722  0.2408 0.8097191
## religpew5         0.0926308  0.4231222  0.2189 0.8267149
## religpew6         1.9667475  0.4217856  4.6629 3.155e-06
## religpew7         0.3174850  0.6665710  0.4763 0.6338733
## religpew8         1.0067798  0.2033333  4.9514 7.481e-07
## religpew9         0.7803279  0.2324334  3.3572 0.0007901
## religpew10        0.5150772  0.2474405  2.0816 0.0374007
## religpew11        0.2453932  0.1640766  1.4956 0.1347868
## religpew12        0.3133848  0.2335048  1.3421 0.1795946
## partyid3_namesIndependent -0.9370274  0.1368953 -6.8448 8.072e-12
## partyid3_namesNot Sure  -1.0829741  0.2628112 -4.1207 3.805e-05
## partyid3_namesOther    -1.2727445  0.4984019 -2.5537 0.0106737
## partyid3_namesRepublican -1.3423535  0.1538156 -8.7270 < 2.2e-16
## ethnocentric1      -0.4795740  0.0782862 -6.1259 9.332e-10
## Empathy:sex         0.0823237  0.0810150  1.0162 0.3095788
## Empathy:birthyr     0.1264521  0.0852562  1.4832 0.1380500
## Empathy:educ        -0.0621191  0.0822445 -0.7553 0.4500870
## Empathy:religpew2    0.2774859  0.2218893  1.2506 0.2111222
## Empathy:religpew3    0.6868256  0.5472739  1.2550 0.2095081
## Empathy:religpew4   -0.6737074  0.9361355 -0.7197 0.4717447

```

```

## Empathy:religpew5          -0.2195785  0.5848266 -0.3755  0.7073264
## Empathy:religpew6          -1.5163969  0.8470203 -1.7903  0.0734383
## Empathy:religpew7           0.4201044  0.8238551  0.5099  0.6101144
## Empathy:religpew8           0.7326961  0.2513612  2.9149  0.0035652
## Empathy:religpew9          -0.0144377  0.3384883 -0.0427  0.9659784
## Empathy:religpew10          0.0500214  0.3390016  0.1476  0.8826966
## Empathy:religpew11         -0.3811756  0.2333683 -1.6334  0.1024216
## Empathy:religpew12         -0.2897961  0.3521663 -0.8229  0.4105855
## Empathy:partyid3_namesIndependent 0.0170001  0.1952559  0.0871  0.9306211
## Empathy:partyid3_namesNot Sure  0.0748595  0.3590147  0.2085  0.8348317
## Empathy:partyid3_namesOther    0.3807373  0.7380632  0.5159  0.6059628
## Empathy:partyid3_namesRepublican 0.2156434  0.2138229  1.0085  0.3132305
## Empathy:ethnocentric1         0.0642351  0.1023981  0.6273  0.5304715
##
## (Intercept)                ***
## Empathy
## sex
## birthyr
## immigrant2                  *
## educ                        **
## religpew2
## religpew3
## religpew4
## religpew5
## religpew6                  ***
## religpew7
## religpew8                  ***
## religpew9                  ***
## religpew10                 *
## religpew11
## religpew12
## partyid3_namesIndependent    ***
## partyid3_namesNot Sure      ***
## partyid3_namesOther         *
## partyid3_namesRepublican    ***
## ethnocentric1               ***
## Empathy:sex
## Empathy:birthyr
## Empathy:educ
## Empathy:religpew2
## Empathy:religpew3
## Empathy:religpew4
## Empathy:religpew5
## Empathy:religpew6          .
## Empathy:religpew7
## Empathy:religpew8          **
## Empathy:religpew9
## Empathy:religpew10
## Empathy:religpew11
## Empathy:religpew12
## Empathy:partyid3_namesIndependent
## Empathy:partyid3_namesNot Sure
## Empathy:partyid3_namesOther
## Empathy:partyid3_namesRepublican
## Empathy:ethnocentric1
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

```

##
## t test of coefficients:
##
##               Estimate Std. Error t value Pr(>|t|)
## (Intercept)      5.2034066  0.1915622  27.1630 < 2.2e-16
## Empathy          -0.2184241  0.2297125  -0.9509  0.341698
## sex               0.0145116  0.0764153   0.1899  0.849388
## birthyr          -0.0236031  0.0803172  -0.2939  0.768860
## immigrant2        -0.1035781  0.1171245  -0.8843  0.376532
## educ              0.1254090  0.0704683   1.7797  0.075161
## religpew2         -0.3128913  0.2002680  -1.5624  0.118232
## religpew3          0.4705359  0.3916792   1.2013  0.229650
## religpew4          0.0566014  0.6660385   0.0850  0.932277
## religpew5         -0.2152290  0.5803491  -0.3709  0.710748
## religpew6          1.8263113  0.4215935   4.3319 1.492e-05
## religpew7          0.2124246  0.5448942   0.3898  0.696658
## religpew8          0.7840948  0.3017299   2.5987  0.009371
## religpew9          0.6752730  0.2606559   2.5907  0.009592
## religpew10         0.3990780  0.2763488   1.4441  0.148737
## religpew11         0.2167432  0.2093028   1.0355  0.300436
## religpew12        -0.2576407  0.3721158  -0.6924  0.488722
## partyid3_namesIndependent -0.9838322  0.1792844  -5.4875 4.168e-08
## partyid3_namesNot Sure  -1.0440350  0.3387610  -3.0819  0.002062
## partyid3_namesOther    -1.4688895  0.4469837  -3.2862  0.001019
## partyid3_namesRepublican -1.4314366  0.1865913  -7.6715 1.847e-14
## ethnocentric1        -0.4864653  0.0956274  -5.0871 3.697e-07
## Empathy:sex          0.0620408  0.1035153   0.5993  0.548959
## Empathy:birthyr      0.2050870  0.1031244   1.9887  0.046756
## Empathy:educ         -0.0091333  0.1093932  -0.0835  0.933463
## Empathy:religpew2     0.5565155  0.2665043   2.0882  0.036803
## Empathy:religpew3     0.1185280  0.4770193   0.2485  0.803771
## Empathy:religpew4    -0.5170077  0.8524621  -0.6065  0.544204
## Empathy:religpew5     0.4831180  0.7438358   0.6495  0.516032
## Empathy:religpew6    -0.8817733  0.5048561  -1.7466  0.080738
## Empathy:religpew7     0.7742789  0.7171311   1.0797  0.280305
## Empathy:religpew8     1.1041159  0.3524824   3.1324  0.001738
## Empathy:religpew9     0.0821466  0.3784771   0.2170  0.828177
## Empathy:religpew10    0.1573134  0.4098279   0.3839  0.701095
## Empathy:religpew11   -0.2858344  0.2821874  -1.0129  0.311119
## Empathy:religpew12    0.1008610  0.5963777   0.1691  0.865703
## Empathy:partyid3_namesIndependent 0.1729528  0.2396421   0.7217  0.470487
## Empathy:partyid3_namesNot Sure  -0.2643149  0.4721106  -0.5599  0.575588
## Empathy:partyid3_namesOther    0.8649340  1.0054776   0.8602  0.389686
## Empathy:partyid3_namesRepublican 0.3943319  0.2584749   1.5256  0.127136
## Empathy:ethnocentric1  0.1077254  0.1272400   0.8466  0.397220
##
## (Intercept)          ***
## Empathy
## sex
## birthyr
## immigrant2
## educ
## religpew2
## religpew3
## religpew4
## religpew5
## religpew6          ***

```

```

## religpew7
## religpew8          **
## religpew9          **
## religpew10
## religpew11
## religpew12
## partyid3_namesIndependent    ***
## partyid3_namesNot Sure      **
## partyid3_namesOther         **
## partyid3_namesRepublican    ***
## ethnocentric1              ***
## Empathy:sex
## Empathy:birthyr           *
## Empathy:educ
## Empathy:religpew2         *
## Empathy:religpew3
## Empathy:religpew4
## Empathy:religpew5
## Empathy:religpew6          .
## Empathy:religpew7
## Empathy:religpew8          **
## Empathy:religpew9
## Empathy:religpew10
## Empathy:religpew11
## Empathy:religpew12
## Empathy:partyid3_namesIndependent
## Empathy:partyid3_namesNot Sure
## Empathy:partyid3_namesOther
## Empathy:partyid3_namesRepublican
## Empathy:ethnocentric1
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

No long-term empathy effect on Y2.

### H3b: (Long term persuasion effect: score)

The persuasion effect on improving scores given to refugee profiles may degrade over time, but will persist. We use the ControlPersuasion.data.y2 dataset, restricted to only individuals who answered the dependent variable questions in Wave 2 (Treatment\_Group==2 or Treatment\_Group==6).

```

##
## t test of coefficients:
##
##
## Estimate Std. Error t value
## (Intercept)      5.045457    0.164058 30.7540
## Persuasion        0.185213    0.220435  0.8402
## sex              -0.049447    0.056595 -0.8737
## birthyr          0.028943    0.061647  0.4695
## immigrant2       -0.164587    0.124681 -1.3201
## educ             0.161053    0.055879  2.8822
## religpew2        -0.104880    0.163227 -0.6425
## religpew3         0.087525    0.397858  0.2200
## religpew4         0.165673    0.649994  0.2549
## religpew5         0.099962    0.424857  0.2353
## religpew6         1.968089    0.420888  4.6760
## religpew7         0.320838    0.667187  0.4809

```

## religpew8	1.011767	0.207443	4.8773
## religpew9	0.782839	0.232702	3.3641
## religpew10	0.518597	0.247770	2.0931
## religpew11	0.246366	0.164358	1.4990
## religpew12	0.314941	0.233476	1.3489
## partyid3_namesIndependent	-0.937746	0.136996	-6.8451
## partyid3_namesNot Sure	-1.082027	0.262975	-4.1146
## partyid3_namesOther	-1.274383	0.499709	-2.5502
## partyid3_namesRepublican	-1.342462	0.153826	-8.7272
## ethnocentric1	-0.479541	0.078314	-6.1233
## Persuasion:sex	-0.092440	0.081802	-1.1300
## Persuasion:birthyr	0.268419	0.085007	3.1576
## Persuasion:immigrant2	-0.167993	0.173828	-0.9664
## Persuasion:educ	-0.055023	0.079291	-0.6939
## Persuasion:religpew2	0.142997	0.230626	0.6200
## Persuasion:religpew3	0.134245	0.478865	0.2803
## Persuasion:religpew4	0.861742	0.941272	0.9155
## Persuasion:religpew5	-0.111342	0.566890	-0.1964
## Persuasion:religpew6	-0.408074	0.546288	-0.7470
## Persuasion:religpew7	0.034162	0.843516	0.0405
## Persuasion:religpew8	0.346503	0.319459	1.0847
## Persuasion:religpew9	-0.503723	0.357230	-1.4101
## Persuasion:religpew10	-0.317253	0.336215	-0.9436
## Persuasion:religpew11	-0.322185	0.239533	-1.3451
## Persuasion:religpew12	-0.522985	0.360616	-1.4503
## Persuasion:partyid3_namesIndependent	0.183304	0.197208	0.9295
## Persuasion:partyid3_namesNot Sure	0.115317	0.376883	0.3060
## Persuasion:partyid3_namesOther	0.414627	0.672330	0.6167
## Persuasion:partyid3_namesRepublican	0.090928	0.212155	0.4286
## Persuasion:ethnocentric1	0.071998	0.101003	0.7128
##	Pr(> t )		
## (Intercept)	< 2.2e-16	***	
## Persuasion	0.4008051		
## sex	0.3822983		
## birthyr	0.6387242		
## immigrant2	0.1868444		
## educ	0.0039573	**	
## religpew2	0.5205365		
## religpew3	0.8258832		
## religpew4	0.7988179		
## religpew5	0.8139921		
## religpew6	2.960e-06	***	
## religpew7	0.6306106		
## religpew8	1.091e-06	***	
## religpew9	0.0007705	***	
## religpew10	0.0363671	*	
## religpew11	0.1339126		
## religpew12	0.1773904		
## partyid3_namesIndependent	8.061e-12	***	
## partyid3_namesNot Sure	3.908e-05	***	
## partyid3_namesOther	0.0107784	*	
## partyid3_namesRepublican	< 2.2e-16	***	
## ethnocentric1	9.483e-10	***	
## Persuasion:sex	0.2584842		
## Persuasion:birthyr	0.0015951	**	
## Persuasion:immigrant2	0.3338485		
## Persuasion:educ	0.4877356		



```

## Persuasion:religpew2          0.5352447
## Persuasion:religpew3          0.7792221
## Persuasion:religpew4          0.3599455
## Persuasion:religpew5          0.8442942
## Persuasion:religpew6          0.4550836
## Persuasion:religpew7          0.9676955
## Persuasion:religpew8          0.2780979
## Persuasion:religpew9          0.1585457
## Persuasion:religpew10         0.3453942
## Persuasion:religpew11         0.1786363
## Persuasion:religpew12         0.1470168
## Persuasion:partyid3_namesIndependent 0.3526534
## Persuasion:partyid3_namesNot Sure 0.7596286
## Persuasion:partyid3_namesOther 0.5374444
## Persuasion:partyid3_namesRepublican 0.6682298
## Persuasion:ethnocentric1      0.4759621
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

##
## t test of coefficients:
##
##
##               Estimate Std. Error t value
## (Intercept)      5.223805   0.218467 23.9111
## Persuasion        0.087658   0.302973  0.2893
## sex              0.014570   0.076447  0.1906
## birthyr        -0.022527   0.079959 -0.2817
## immigrant2      -0.131690   0.182590 -0.7212
## educ            0.125630   0.070461  1.7830
## religpew2      -0.320421   0.206208 -1.5539
## religpew3       0.462666   0.396176  1.1678
## religpew4       0.044306   0.678359  0.0653
## religpew5      -0.227953   0.585899 -0.3891
## religpew6       1.819413   0.427880  4.2522
## religpew7       0.207215   0.546082  0.3795
## religpew8       0.783752   0.299092  2.6204
## religpew9       0.671228   0.262244  2.5595
## religpew10      0.392838   0.279214  1.4069
## religpew11      0.217509   0.208690  1.0423
## religpew12     -0.261547   0.370898 -0.7052
## partyid3_namesIndependent -0.981812   0.181212 -5.4180
## partyid3_namesNot Sure -1.044004   0.337490 -3.0934
## partyid3_namesOther -1.465992   0.445690 -3.2893
## partyid3_namesRepublican -1.429766   0.186730 -7.6569
## ethnocentric1   -0.486508   0.095679 -5.0848
## Persuasion:sex   -0.177913   0.113431 -1.5685
## Persuasion:birthyr  0.351790   0.119198  2.9513
## Persuasion:immigrant2 -0.313400   0.260063 -1.2051
## Persuasion:educ   -0.031645   0.102784 -0.3079
## Persuasion:religpew2  0.341748   0.315406  1.0835
## Persuasion:religpew3 -0.081683   0.525724 -0.1554
## Persuasion:religpew4  0.813970   0.868351  0.9374
## Persuasion:religpew5  0.087768   0.691149  0.1270
## Persuasion:religpew6 -0.818835   0.621322 -1.3179
## Persuasion:religpew7 -0.535634   0.842914 -0.6355
## Persuasion:religpew8  0.297725   0.400752  0.7429
## Persuasion:religpew9 -0.453543   0.434180 -1.0446

```

```

## Persuasion:religpew10      -0.245496    0.370011 -0.6635
## Persuasion:religpew11      -0.481281    0.343200 -1.4023
## Persuasion:religpew12      -0.101733    0.447050 -0.2276
## Persuasion:partyid3_namesIndependent  0.542730    0.272913  1.9887
## Persuasion:partyid3_namesNot Sure    0.579666    0.466942  1.2414
## Persuasion:partyid3_namesOther    0.650707    0.684624  0.9505
## Persuasion:partyid3_namesRepublican  0.198223    0.275680  0.7190
## Persuasion:ethnocentric1    0.073589    0.129865  0.5667
##                               Pr(>|t|)
## (Intercept)                < 2.2e-16 ***
## Persuasion                  0.772338
## sex                        0.848852
## birthyr                    0.778159
## immigrant2                 0.470780
## educ                       0.074619 .
## religpew2                  0.120245
## religpew3                  0.242902
## religpew4                  0.947925
## religpew5                  0.697235
## religpew6                  2.135e-05 ***
## religpew7                  0.704356
## religpew8                  0.008794 **
## religpew9                  0.010494 *
## religpew10                 0.159473
## religpew11                 0.297316
## religpew12                 0.480719
## partyid3_namesIndependent  6.155e-08 ***
## partyid3_namesNot Sure    0.001984 **
## partyid3_namesOther       0.001008 **
## partyid3_namesRepublican  2.069e-14 ***
## ethnocentric1             3.742e-07 ***
## Persuasion:sex             0.116800
## Persuasion:birthyr         0.003171 **
## Persuasion:immigrant2      0.228194
## Persuasion:educ            0.758182
## Persuasion:religpew2       0.278602
## Persuasion:religpew3       0.876531
## Persuasion:religpew4       0.348587
## Persuasion:religpew5       0.898952
## Persuasion:religpew6       0.187568
## Persuasion:religpew7       0.525145
## Persuasion:religpew8       0.457549
## Persuasion:religpew9       0.296233
## Persuasion:religpew10      0.507036
## Persuasion:religpew11      0.160844
## Persuasion:religpew12      0.819988
## Persuasion:partyid3_namesIndependent  0.046765 *
## Persuasion:partyid3_namesNot Sure    0.214482
## Persuasion:partyid3_namesOther    0.341901
## Persuasion:partyid3_namesRepublican  0.472136
## Persuasion:ethnocentric1    0.570958
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

No longterm persuasion effect on Y2.

#### H4a: (Long term empathy effect: letter)

The empathy prime effect on sending an anonymous letter to the next President of the U.S. in support of resettling refugees may degrade over time, but will persist. We use the `ControlEmpathy.data` dataset, restricted to only individuals who answered the dependent variable questions in Wave 2 (`Treatment_Group==2` or `Treatment_Group==4`).

```
##
## t test of coefficients:
##
##               Estimate Std. Error t value
## (Intercept)      0.31182848 0.03541570  8.8048
## Empathy           0.03259967 0.04431048  0.7357
## sex              0.00383996 0.01268464  0.3027
## birthyr         -0.03595252 0.01383868 -2.5980
## immigrant2       -0.04130419 0.02037785 -2.0269
## educ             0.04662389 0.01422915  3.2766
## religpew2        -0.02190258 0.03227809 -0.6786
## religpew3        -0.05647455 0.08175812 -0.6908
## religpew4        -0.12996881 0.09130908 -1.4234
## religpew5         0.06539222 0.12393848  0.5276
## religpew6         0.32439325 0.14777421  2.1952
## religpew7         0.48018846 0.12437838  3.8607
## religpew8         0.07033016 0.07360701  0.9555
## religpew9         0.18899112 0.06633062  2.8492
## religpew10        0.14321561 0.07116514  2.0124
## religpew11        0.01305312 0.03674095  0.3553
## religpew12        0.06538783 0.05197297  1.2581
## partyid3_namesIndependent -0.15214136 0.03311887 -4.5938
## partyid3_namesNot Sure   -0.17912359 0.05011884 -3.5740
## partyid3_namesOther       0.07762475 0.14419807  0.5383
## partyid3_namesRepublican -0.22964412 0.03172449 -7.2387
## ethnocentric1          -0.07783262 0.01355929 -5.7402
## Empathy:sex             0.00454912 0.01816646  0.2504
## Empathy:birthyr         0.03358215 0.01959325  1.7140
## Empathy:educ            0.00045923 0.01963734  0.0234
## Empathy:religpew2       0.01016784 0.04656556  0.2184
## Empathy:religpew3       0.04810622 0.13442273  0.3579
## Empathy:religpew4       0.31385453 0.17790247  1.7642
## Empathy:religpew5      -0.08042921 0.14887407 -0.5402
## Empathy:religpew6      -0.28232847 0.23380005 -1.2076
## Empathy:religpew7      -0.27361531 0.22795239 -1.2003
## Empathy:religpew8      -0.33555782 0.08184270 -4.1000
## Empathy:religpew9      -0.12034768 0.09459080 -1.2723
## Empathy:religpew10     -0.10868556 0.09556534 -1.1373
## Empathy:religpew11     -0.05345248 0.04952380 -1.0793
## Empathy:religpew12     -0.01068803 0.07956663 -0.1343
## Empathy:partyid3_namesIndependent 0.04399872 0.04819827  0.9129
## Empathy:partyid3_namesNot Sure   -0.07062185 0.06434594 -1.0975
## Empathy:partyid3_namesOther     -0.12058074 0.19212628 -0.6276
## Empathy:partyid3_namesRepublican -0.00740744 0.04442992 -0.1667
## Empathy:ethnocentric1          -0.00325174 0.01958424 -0.1660
##               Pr(>|t|)
## (Intercept)      < 2.2e-16 ***
## Empathy           0.4620052
## sex              0.7621352
## birthyr          0.0094558 **
## immigrant2       0.0428216 *
```

```

## educ 0.0010709 **
## religpew2 0.4975068
## religpew3 0.4898128
## religpew4 0.1547993
## religpew5 0.5978308
## religpew6 0.0282798 *
## religpew7 0.0001171 ***
## religpew8 0.3394654
## religpew9 0.0044335 **
## religpew10 0.0443257 *
## religpew11 0.7224266
## religpew12 0.2085182
## partyid3_namesIndependent 4.662e-06 ***
## partyid3_namesNot Sure 0.0003611 ***
## partyid3_namesOther 0.5904240
## partyid3_namesRepublican 6.739e-13 ***
## ethnocentric1 1.112e-08 ***
## Empathy:sex 0.8022971
## Empathy:birthyr 0.0867113 .
## Empathy:educ 0.9813453
## Empathy:religpew2 0.8271776
## Empathy:religpew3 0.7204816
## Empathy:religpew4 0.0778728 .
## Empathy:religpew5 0.5890931
## Empathy:religpew6 0.2273774
## Empathy:religpew7 0.2301776
## Empathy:religpew8 4.319e-05 ***
## Empathy:religpew9 0.2034354
## Empathy:religpew10 0.2555717
## Empathy:religpew11 0.2805891
## Empathy:religpew12 0.8931586
## Empathy:partyid3_namesIndependent 0.3614365
## Empathy:partyid3_namesNot Sure 0.2725583
## Empathy:partyid3_namesOther 0.5303397
## Empathy:partyid3_namesRepublican 0.8676081
## Empathy:ethnocentric1 0.8681455
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

##
## t test of coefficients:
##
##
## Estimate Std. Error t value
## (Intercept) 0.32017081 0.05133112 6.2374
## Empathy -0.02409265 0.06011390 -0.4008
## sex 0.00411188 0.01701054 0.2417
## birthyr -0.05604463 0.01884876 -2.9734
## immigrant2 -0.01498669 0.02717770 -0.5514
## educ 0.04408291 0.01789436 2.4635
## religpew2 -0.01990024 0.04380570 -0.4543
## religpew3 -0.04666946 0.06900749 -0.6763
## religpew4 -0.13731313 0.09777603 -1.4044
## religpew5 0.05359842 0.14124736 0.3795
## religpew6 0.40164440 0.13990435 2.8708
## religpew7 0.39419899 0.15499458 2.5433
## religpew8 0.00986587 0.09412486 0.1048
## religpew9 0.14218121 0.07571601 1.8778

```

## religpew10	0.15221284	0.10162374	1.4978
## religpew11	-0.00900132	0.04979680	-0.1808
## religpew12	-0.01388624	0.05335231	-0.2603
## partyid3_namesIndependent	-0.16261400	0.04391225	-3.7032
## partyid3_namesNot Sure	-0.15517308	0.08076432	-1.9213
## partyid3_namesOther	0.05712266	0.15958773	0.3579
## partyid3_namesRepublican	-0.24714303	0.04471543	-5.5270
## ethnocentric1	-0.07793346	0.01683206	-4.6301
## Empathy:sex	0.02291788	0.02373123	0.9657
## Empathy:birthyr	0.04988930	0.02782230	1.7931
## Empathy:educ	0.01163965	0.02536696	0.4589
## Empathy:religpew2	0.07826307	0.06597281	1.1863
## Empathy:religpew3	0.05726405	0.11354128	0.5043
## Empathy:religpew4	0.42106712	0.18075999	2.3294
## Empathy:religpew5	0.00040302	0.16178383	0.0025
## Empathy:religpew6	-0.48926017	0.17769513	-2.7534
## Empathy:religpew7	-0.00654547	0.24941177	-0.0262
## Empathy:religpew8	-0.21103009	0.10482072	-2.0132
## Empathy:religpew9	-0.02003024	0.11399012	-0.1757
## Empathy:religpew10	-0.06385898	0.12611522	-0.5064
## Empathy:religpew11	0.01985681	0.06524193	0.3044
## Empathy:religpew12	0.05670663	0.09088296	0.6240
## Empathy:partyid3_namesIndependent	0.05830734	0.06262828	0.9310
## Empathy:partyid3_namesNot Sure	-0.11989704	0.09278297	-1.2922
## Empathy:partyid3_namesOther	0.05666233	0.25867320	0.2190
## Empathy:partyid3_namesRepublican	0.01904726	0.05842093	0.3260
## Empathy:ethnocentric1	0.00792006	0.02424428	0.3267
##	Pr(> t )		
## (Intercept)	5.561e-10	***	
## Empathy	0.6886283		
## sex	0.8090212		
## birthyr	0.0029854	**	
## immigrant2	0.5814068		
## educ	0.0138536	*	
## religpew2	0.6496803		
## religpew3	0.4989419		
## religpew4	0.1603871		
## religpew5	0.7043885		
## religpew6	0.0041427	**	
## religpew7	0.0110658	*	
## religpew8	0.9165331		
## religpew9	0.0605708	.	
## religpew10	0.1343626		
## religpew11	0.8565760		
## religpew12	0.7946825		
## partyid3_namesIndependent	0.0002195	***	
## partyid3_namesNot Sure	0.0548544	.	
## partyid3_namesOther	0.7204320		
## partyid3_namesRepublican	3.745e-08	***	
## ethnocentric1	3.924e-06	***	
## Empathy:sex	0.3343138		
## Empathy:birthyr	0.0731222	.	
## Empathy:educ	0.6463982		
## Empathy:religpew2	0.2356669		
## Empathy:religpew3	0.6140817		
## Empathy:religpew4	0.0199492	*	
## Empathy:religpew5	0.9980127		

```
## Empathy:religpew6          0.0059592 **
## Empathy:religpew7          0.9790660
## Empathy:religpew8          0.0442406 *
## Empathy:religpew9          0.8605349
## Empathy:religpew10         0.6126714
## Empathy:religpew11         0.7608923
## Empathy:religpew12         0.5327398
## Empathy:partyid3_namesIndependent 0.3519779
## Empathy:partyid3_namesNot Sure 0.1964469
## Empathy:partyid3_namesOther 0.8266366
## Empathy:partyid3_namesRepublican 0.7444368
## Empathy:ethnocentric1      0.7439508
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

No long-term empathy effect on Y6.

#### H4b: (Long term persuasion effect: letter)

The persuasion effect on sending an anonymous letter to the next President of the U.S. in support of resettling refugees may degrade over time, but will persist. We use the `ControlPersuasion.data` dataset, restricted to only individuals who answered the dependent variable questions in Wave 2 (`Treatment_Group==2` or `Treatment_Group==6`).

```
##
## t test of coefficients:
##
##               Estimate Std. Error t value Pr(>|t|)
## (Intercept)    0.2938289  0.0186008  15.7965 < 2.2e-16 ***
## sex            0.0030702  0.0063150   0.4862 0.6268677
## birthyr       -0.0147648  0.0067403  -2.1905 0.0285491 *
## immigrant2     -0.0372159  0.0139436  -2.6690 0.0076415 **
## educ           0.0466556  0.0068609   6.8002 1.219e-11 ***
## religpew2      0.0043429  0.0173630   0.2501 0.8025055
## religpew3      0.0077895  0.0484834   0.1607 0.8723673
## religpew4      0.0110289  0.0635042   0.1737 0.8621331
## religpew5      0.0706203  0.0476170   1.4831 0.1381383
## religpew6      0.1184205  0.0787105   1.5045 0.1325393
## religpew7      0.2915672  0.0791092   3.6856 0.0002315 ***
## religpew8      0.0375459  0.1195756   0.3140 0.7535448
## religpew9      0.1394290  0.0331137   4.2106 2.609e-05 ***
## religpew10     0.0913202  0.0316021   2.8897 0.0038794 **
## religpew11     -0.0082175  0.0168878  -0.4866 0.6265770
## religpew12     0.0786464  0.0288368   2.7273 0.0064167 **
## partyid3_namesIndependent -0.1036378  0.0166840  -6.2118 5.839e-10 ***
## partyid3_namesNot Sure   -0.1809280  0.0222893  -8.1173 6.492e-16 ***
## partyid3_namesOther      0.0290661  0.0858821   0.3384 0.7350499
## partyid3_namesRepublican -0.2019256  0.0152419 -13.2480 < 2.2e-16 ***
## ethnocentric1   -0.0763197  0.0067539 -11.3001 < 2.2e-16 ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

##
## t test of coefficients:
##
##               Estimate Std. Error t value Pr(>|t|)
## (Intercept)    0.2688301  0.0234460  11.4659 < 2.2e-16 ***
## sex            0.0042031  0.0084225   0.4990 0.6177914
## birthyr       -0.0230539  0.0094228  -2.4466 0.0144690 *
```

```

## immigrant2          -0.0108373  0.0178459  -0.6073  0.5437087
## educ                0.0500698  0.0085816   5.8345  5.873e-09 ***
## religpew2           0.0396529  0.0245562   1.6148  0.1064471
## religpew3           0.0279064  0.0504831   0.5528  0.5804438
## religpew4           0.0252470  0.0657656   0.3839  0.7010798
## religpew5           0.0912895  0.0509796   1.7907  0.0734250 .
## religpew6           0.0577841  0.0762886   0.7574  0.4488361
## religpew7           0.2960087  0.0887630   3.3348  0.0008622 ***
## religpew8           0.0391908  0.1124237   0.3486  0.7274109
## religpew9           0.1475713  0.0426173   3.4627  0.0005410 ***
## religpew10          0.1131107  0.0400702   2.8228  0.0047867 **
## religpew11          0.0062443  0.0232339   0.2688  0.7881327
## religpew12          0.0481422  0.0359672   1.3385  0.1808168
## partyid3_namesIndependent -0.0943570  0.0225061  -4.1925  2.826e-05 ***
## partyid3_namesNot Sure  -0.1694059  0.0316237  -5.3569  8.999e-08 ***
## partyid3_namesOther     0.0100322  0.1351415   0.0742  0.9408277
## partyid3_namesRepublican -0.2045643  0.0198028 -10.3301 < 2.2e-16 ***
## ethnocentric1         -0.0693080  0.0085763  -8.0813  8.677e-16 ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

No long-term persuasion effect on Y6.

## Secondary hypotheses: H5a - H6b

### H5a: (Heterogeneous effect of empathy and Muslim: score)

The empathy prime interacted with a Muslim refugee profile will lead to higher admission scores on average than no treatment interacted with Muslim refugee profiles. We use the `ControlEmpathy.data.y2` dataset, for wave 1.

```

##
## t test of coefficients:
##
##               Estimate Std. Error t value
## (Intercept)      5.49262106  0.15176936 36.1906
## Empathy           0.03545397  0.18727475  0.1893
## muslim           -0.24612988  0.07698534 -3.1971
## sex              0.02674572  0.05576782  0.4796
## birthyr          0.06561028  0.05455314  1.2027
## immigrant2       -0.22062680  0.08557069 -2.5783
## educ             0.15924133  0.05603252  2.8419
## religpew2        -0.16100109  0.16967338 -0.9489
## religpew3         0.00041213  0.33340338  0.0012
## religpew4         0.60919269  0.29358275  2.0750
## religpew5         0.34882077  0.28199526  1.2370
## religpew6        -0.04770063  0.33320761 -0.1432
## religpew7         0.33845917  0.38619129  0.8764
## religpew8         1.98094261  0.17537527 11.2954
## religpew9         0.33059854  0.22583721  1.4639
## religpew10        0.45813709  0.21825003  2.0991
## religpew11        0.03427389  0.16429508  0.2086
## religpew12        0.64643298  0.24363731  2.6533
## partyid3_namesIndependent -0.89027398  0.13048163 -6.8230
## partyid3_namesNot Sure  -0.82844532  0.23916575 -3.4639
## partyid3_namesOther     0.62555616  0.41906822  1.4927
## partyid3_namesRepublican -1.17408506  0.14727546 -7.9720
## ethnocentric1      -0.33711181  0.07523816 -4.4806

```

## Empathy:muslim	-0.04221601	0.10975542	-0.3846
## Empathy:sex	-0.02123255	0.07924915	-0.2679
## Empathy:birthyr	0.15226896	0.07801526	1.9518
## Empathy:educ	0.02259223	0.07947021	0.2843
## Empathy:religpew2	0.22484454	0.22779554	0.9870
## Empathy:religpew3	0.17245860	0.61165789	0.2820
## Empathy:religpew4	-1.71773790	0.85377987	-2.0119
## Empathy:religpew5	-0.50250279	0.45170476	-1.1125
## Empathy:religpew6	0.30208744	0.80096401	0.3772
## Empathy:religpew7	0.65914165	0.44223823	1.4905
## Empathy:religpew8	-1.25186976	0.51715979	-2.4207
## Empathy:religpew9	-0.40192103	0.32713516	-1.2286
## Empathy:religpew10	-0.37017732	0.31239612	-1.1850
## Empathy:religpew11	-0.20158459	0.23269226	-0.8663
## Empathy:religpew12	-0.76404618	0.33784117	-2.2616
## Empathy:partyid3_namesIndependent	0.36669207	0.18194639	2.0154
## Empathy:partyid3_namesNot Sure	0.06111327	0.35208099	0.1736
## Empathy:partyid3_namesOther	-2.01261773	1.70680307	-1.1792
## Empathy:partyid3_namesRepublican	-0.06232993	0.21423687	-0.2909
## Empathy:ethnocentric1	-0.04044446	0.10128293	-0.3993
##	Pr(> t )		
## (Intercept)	< 2.2e-16 ***		
## Empathy	0.8498493		
## muslim	0.0013922 **		
## sex	0.6315283		
## birthyr	0.2291244		
## immigrant2	0.0099420 **		
## educ	0.0044924 **		
## religpew2	0.3426987		
## religpew3	0.9990137		
## religpew4	0.0380076 *		
## religpew5	0.2161238		
## religpew6	0.8861698		
## religpew7	0.3808306		
## religpew8	< 2.2e-16 ***		
## religpew9	0.1432560		
## religpew10	0.0358279 *		
## religpew11	0.8347553		
## religpew12	0.0079836 **		
## partyid3_namesIndependent	9.396e-12 ***		
## partyid3_namesNot Sure	0.0005345 ***		
## partyid3_namesOther	0.1355369		
## partyid3_namesRepublican	1.719e-15 ***		
## ethnocentric1	7.520e-06 ***		
## Empathy:muslim	0.7005139		
## Empathy:sex	0.7887649		
## Empathy:birthyr	0.0509897 .		
## Empathy:educ	0.7761970		
## Empathy:religpew2	0.3236426		
## Empathy:religpew3	0.7779852		
## Empathy:religpew4	0.0442531 *		
## Empathy:religpew5	0.2659659		
## Empathy:religpew6	0.7060660		
## Empathy:religpew7	0.1361307		
## Empathy:religpew8	0.0155087 *		
## Empathy:religpew9	0.2192455		
## Empathy:religpew10	0.2360589		



```
## Empathy:religpew11          0.3863372
## Empathy:religpew12          0.0237448 *
## Empathy:partyid3_namesIndependent 0.0438891 *
## Empathy:partyid3_namesNot Sure  0.8622009
## Empathy:partyid3_namesOther    0.2383550
## Empathy:partyid3_namesRepublican 0.7711033
## Empathy:ethnocentric1         0.6896642
```

```
## ---
```

```
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

No statistically significant effect of Empathy:muslim on Y2.

### H5b: (Heterogeneous effect of persuasion and Muslim: score)

The persuasion treatment will improve scores for Muslim refugee profiles and will be correlated with higher admission scores than Muslim refugee profiles in the control. We use the `ControlPersuasion.data.y2` dataset, for wave 1.

```
##
```

```
## t test of coefficients:
```

```
##
```

	Estimate	Std. Error	t value
## (Intercept)	5.5339026	0.1652783	33.4823
## Persuasion	-0.1855552	0.2303959	-0.8054
## muslim	-0.2463912	0.0770188	-3.1991
## sex	0.0264479	0.0557278	0.4746
## birthyr	0.0684556	0.0547873	1.2495
## immigrant2	-0.2726412	0.1201158	-2.2698
## educ	0.1578620	0.0561464	2.8116
## religpew2	-0.1763659	0.1721506	-1.0245
## religpew3	-0.0055522	0.3324291	-0.0167
## religpew4	0.5939501	0.2886493	2.0577
## religpew5	0.3305599	0.2827653	1.1690
## religpew6	-0.0667303	0.3390494	-0.1968
## religpew7	0.3333949	0.3855013	0.8648
## religpew8	1.9902752	0.1754391	11.3445
## religpew9	0.3251940	0.2254404	1.4425
## religpew10	0.4568581	0.2185861	2.0901
## religpew11	0.0293770	0.1640492	0.1791
## religpew12	0.6438742	0.2439332	2.6396
## partyid3_namesIndependent	-0.8951692	0.1307299	-6.8475
## partyid3_namesNot Sure	-0.8303275	0.2387280	-3.4781
## partyid3_namesOther	0.6085794	0.4377631	1.3902
## partyid3_namesRepublican	-1.1736949	0.1472479	-7.9709
## ethnocentric1	-0.3372106	0.0751132	-4.4894
## Persuasion:muslim	0.0445812	0.1111872	0.4010
## Persuasion:sex	-0.0250555	0.0794284	-0.3154
## Persuasion:birthyr	0.1632491	0.0750513	2.1752
## Persuasion:immigrant2	0.1265768	0.1710410	0.7400
## Persuasion:educ	-0.0217174	0.0796688	-0.2726
## Persuasion:religpew2	0.2810272	0.2384593	1.1785
## Persuasion:religpew3	0.4527709	0.5955628	0.7602
## Persuasion:religpew4	0.0786755	0.6155145	0.1278
## Persuasion:religpew5	-0.3275378	0.4591334	-0.7134
## Persuasion:religpew6	0.9011468	0.6830682	1.3193
## Persuasion:religpew7	0.5449743	0.5213328	1.0453
## Persuasion:religpew9	0.2468318	0.3096481	0.7971
## Persuasion:religpew10	-0.1110499	0.3195575	-0.3475

```

## Persuasion:religpew11          -0.1203754  0.2344810 -0.5134
## Persuasion:religpew12          -0.6083946  0.3822496 -1.5916
## Persuasion:partyid3_namesIndependent  0.0012544  0.1885793  0.0067
## Persuasion:partyid3_namesNot Sure -0.0208312  0.3627136 -0.0574
## Persuasion:partyid3_namesOther -1.7060601  0.6268586 -2.7216
## Persuasion:partyid3_namesRepublican -0.2494896  0.2126300 -1.1734
## Persuasion:ethnocentric1        0.0128720  0.1041790  0.1236
##                                Pr(>|t|)
## (Intercept)                    < 2.2e-16 ***
## Persuasion                      0.4206210
## muslim                          0.0013825 **
## sex                             0.6350877
## birthyr                        0.2115168
## immigrant2                     0.0232383 *
## educ                           0.0049383 **
## religpew2                      0.3056288
## religpew3                      0.9866747
## religpew4                      0.0396442 *
## religpew5                      0.2424193
## religpew6                      0.8439754
## religpew7                      0.3871489
## religpew8                      < 2.2e-16 ***
## religpew9                      0.1491953
## religpew10                     0.0366358 *
## religpew11                     0.8578827
## religpew12                     0.0083136 **
## partyid3_namesIndependent      7.927e-12 ***
## partyid3_namesNot Sure        0.0005069 ***
## partyid3_namesOther           0.1644961
## partyid3_namesRepublican      1.735e-15 ***
## ethnocentric1                 7.218e-06 ***
## Persuasion:muslim             0.6884604
## Persuasion:sex                0.7524282
## Persuasion:birthyr            0.0296393 *
## Persuasion:immigrant2         0.4592933
## Persuasion:educ               0.7851693
## Persuasion:religpew2          0.2386184
## Persuasion:religpew3          0.4471275
## Persuasion:religpew4          0.8982932
## Persuasion:religpew5          0.4756245
## Persuasion:religpew6          0.1871092
## Persuasion:religpew7          0.2958856
## Persuasion:religpew9          0.4253895
## Persuasion:religpew10         0.7282138
## Persuasion:religpew11         0.6077032
## Persuasion:religpew12         0.1115004
## Persuasion:partyid3_namesIndependent 0.9946926
## Persuasion:partyid3_namesNot Sure 0.9542025
## Persuasion:partyid3_namesOther 0.0065071 **
## Persuasion:partyid3_namesRepublican 0.2406812
## Persuasion:ethnocentric1      0.9016684
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

No statistically significant effect of Persuasion:muslim on Y2.

## H6a: (Heterogeneous effect of empathy and Muslim: letter)

The empathy prime combined with seeing Muslim refugee profiles will be correlated with a higher likelihood of sending an anonymous letter to the next President of the U.S. in support of resettling refugees, controlling for the number of Muslim refugee profiles seen. We use the `ControlEmpathy.data` dataset using the variable `num_muslims` for number of Muslim refugee profiles seen, for wave 1.

```
##
## t test of coefficients:
##
##               Estimate Std. Error t value Pr(>|t|)
## (Intercept)      0.1842570  0.0300886   6.1238 1.125e-09
## Empathy           0.1431792  0.0399120   3.5874 0.0003432
## num_muslim       -0.0022704  0.0116531  -0.1948 0.8455482
## sex               0.0103305  0.0119886   0.8617 0.3889728
## birthyr          -0.0187265  0.0124163  -1.5082 0.1316791
## immigrant2        -0.0302800  0.0190101  -1.5928 0.1113767
## educ              0.0656363  0.0133527   4.9156 9.677e-07
## religpew2         0.0728582  0.0337360   2.1597 0.0309342
## religpew3         0.0148468  0.0680149   0.2183 0.8272310
## religpew4         0.0440357  0.1064696   0.4136 0.6792182
## religpew5         0.1122142  0.0862893   1.3004 0.1936203
## religpew6        -0.0440111  0.0588713  -0.7476 0.4548130
## religpew7         0.1232570  0.1557582   0.7913 0.4288552
## religpew8        -0.0650434  0.0306879  -2.1195 0.0341874
## religpew9         0.1307304  0.0621882   2.1022 0.0356801
## religpew10        0.1439262  0.0545267   2.6396 0.0083749
## religpew11        0.0274081  0.0301353   0.9095 0.3632110
## religpew12        0.1253019  0.0602105   2.0811 0.0375726
## partyid3_namesIndependent -0.0220901  0.0313749  -0.7041 0.4814837
## partyid3_namesNot Sure   -0.0839524  0.0387649  -2.1657 0.0304698
## partyid3_namesOther      -0.2208374  0.0630574  -3.5022 0.0004730
## partyid3_namesRepublican -0.1347502  0.0272301  -4.9486 8.191e-07
## ethnocentric1         -0.0596166  0.0119619  -4.9839 6.846e-07
## Empathy:num_muslim      -0.0048093  0.0170458  -0.2821 0.7778686
## Empathy:sex            -0.0197011  0.0176174  -1.1183 0.2636014
## Empathy:birthyr        0.0230847  0.0186207   1.2397 0.2152406
## Empathy:educ           -0.0412346  0.0192351  -2.1437 0.0321921
## Empathy:religpew2      -0.0840524  0.0469627  -1.7898 0.0736633
## Empathy:religpew3       0.1066934  0.1486852   0.7176 0.4731123
## Empathy:religpew4      -0.1734967  0.1145419  -1.5147 0.1300279
## Empathy:religpew5       0.0104015  0.1263726   0.0823 0.9344109
## Empathy:religpew6       0.0273583  0.1453687   0.1882 0.8507421
## Empathy:religpew7       0.1452977  0.2184579   0.6651 0.5060697
## Empathy:religpew8       0.2486580  0.2921501   0.8511 0.3948126
## Empathy:religpew9       0.0452936  0.0906994   0.4994 0.6175731
## Empathy:religpew10     -0.0972712  0.0851731  -1.1420 0.2535929
## Empathy:religpew11     -0.0588976  0.0461485  -1.2763 0.2020316
## Empathy:religpew12     -0.0376725  0.0840987  -0.4480 0.6542400
## Empathy:partyid3_namesIndependent -0.1145000  0.0456225  -2.5097 0.0121718
## Empathy:partyid3_namesNot Sure   -0.1342426  0.0639876  -2.0979 0.0360524
## Empathy:partyid3_namesOther    0.3517763  0.3039883   1.1572 0.2473466
## Empathy:partyid3_namesRepublican -0.0708856  0.0418035  -1.6957 0.0901224
## Empathy:ethnocentric1     -0.0276544  0.0180615  -1.5311 0.1259182
##
## (Intercept)          ***
## Empathy               ***
```

```

## num_muslim
## sex
## birthyr
## immigrant2
## educ ***
## religpew2 *
## religpew3
## religpew4
## religpew5
## religpew6
## religpew7
## religpew8 *
## religpew9 *
## religpew10 **
## religpew11
## religpew12 *
## partyid3_namesIndependent
## partyid3_namesNot Sure *
## partyid3_namesOther ***
## partyid3_namesRepublican ***
## ethnocentric1 ***
## Empathy:num_muslim
## Empathy:sex
## Empathy:birthyr
## Empathy:educ *
## Empathy:religpew2 .
## Empathy:religpew3
## Empathy:religpew4
## Empathy:religpew5
## Empathy:religpew6
## Empathy:religpew7
## Empathy:religpew8
## Empathy:religpew9
## Empathy:religpew10
## Empathy:religpew11
## Empathy:religpew12
## Empathy:partyid3_namesIndependent *
## Empathy:partyid3_namesNot Sure *
## Empathy:partyid3_namesOther
## Empathy:partyid3_namesRepublican .
## Empathy:ethnocentric1
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

No statistically significant effect of Empathy:num\_muslim on Y6.

### H6b: (Heterogeneous effect of persuasion and Muslim: letter)

The persuasion prime combined with seeing Muslim refugee profiles will be correlated with a higher likelihood of sending an anonymous letter to the next President of the U.S. in support of resettling refugees, controlling for the number of Muslim refugee profiles seen. We use the `ControlPersuasion.data` dataset using the variable `num_muslims` for number of Muslim refugee profiles seen, for wave 1.

```

##
## t test of coefficients:
##
## Estimate Std. Error t value

```

## (Intercept)	0.1618617	0.0330603	4.8960
## Persuasion	0.0561832	0.0469258	1.1973
## num_muslim	-0.0020947	0.0116327	-0.1801
## sex	0.0105062	0.0119162	0.8817
## birthyr	-0.0202899	0.0124165	-1.6341
## immigrant2	-0.0019352	0.0259135	-0.0747
## educ	0.0663607	0.0131921	5.0303
## religpew2	0.0812423	0.0342318	2.3733
## religpew3	0.0180555	0.0689514	0.2619
## religpew4	0.0523915	0.1047439	0.5002
## religpew5	0.1221176	0.0861019	1.4183
## religpew6	-0.0335196	0.0568217	-0.5899
## religpew7	0.1261760	0.1544053	0.8172
## religpew8	-0.0700629	0.0310016	-2.2600
## religpew9	0.1336159	0.0618701	2.1596
## religpew10	0.1445604	0.0545102	2.6520
## religpew11	0.0300661	0.0301620	0.9968
## religpew12	0.1266753	0.0600398	2.1099
## partyid3_namesIndependent	-0.0194199	0.0313768	-0.6189
## partyid3_namesNot Sure	-0.0828620	0.0388420	-2.1333
## partyid3_namesOther	-0.2115145	0.0551947	-3.8322
## partyid3_namesRepublican	-0.1348891	0.0273250	-4.9365
## ethnocentric1	-0.0597253	0.0083646	-7.1403
## Persuasion:num_muslim	0.0023781	0.0167738	0.1418
## Persuasion:sex	-0.0068952	0.0169727	-0.4063
## Persuasion:birthyr	0.0367489	0.0174389	2.1073
## Persuasion:immigrant2	0.0303722	0.0369795	0.8213
## Persuasion:educ	-0.0181368	0.0184127	-0.9850
## Persuasion:religpew2	-0.0829804	0.0483361	-1.7167
## Persuasion:religpew3	0.0414742	0.1613628	0.2570
## Persuasion:religpew4	-0.1070358	0.1640654	-0.6524
## Persuasion:religpew5	-0.1276299	0.1122326	-1.1372
## Persuasion:religpew6	-0.0364207	0.0998243	-0.3648
## Persuasion:religpew7	0.0590497	0.1975366	0.2989
## Persuasion:religpew9	-0.0664065	0.0838614	-0.7919
## Persuasion:religpew10	-0.1196347	0.0822632	-1.4543
## Persuasion:religpew11	-0.0632273	0.0435234	-1.4527
## Persuasion:religpew12	-0.0355112	0.0882549	-0.4024
## Persuasion:partyid3_namesIndependent	-0.0795504	0.0435894	-1.8250
## Persuasion:partyid3_namesNot Sure	-0.0541598	0.0593704	-0.9122
## Persuasion:partyid3_namesOther	0.1157884	0.1236805	0.9362
## Persuasion:partyid3_namesRepublican	-0.0238921	0.0394632	-0.6054
##	Pr(> t )		
## (Intercept)	1.068e-06	***	
## Persuasion	0.2313598		
## num_muslim	0.8571175		
## sex	0.3780713		
## birthyr	0.1024148		
## immigrant2	0.9404786		
## educ	5.396e-07	***	
## religpew2	0.0177369	*	
## religpew3	0.7934608		
## religpew4	0.6170061		
## religpew5	0.1562830		
## religpew6	0.5553273		
## religpew7	0.4139398		
## religpew8	0.0239445	*	

```
## religpew9          0.0309371 *
## religpew10         0.0080739 **
## religpew11         0.3189882
## religpew12         0.0350119 *
## partyid3_namesIndependent 0.5360458
## partyid3_namesNot Sure 0.0330377 *
## partyid3_namesOther 0.0001315 ***
## partyid3_namesRepublican 8.708e-07 ***
## ethnocentric1      1.358e-12 ***
## Persuasion:num_muslim 0.8872758
## Persuasion:sex     0.6846063
## Persuasion:birthyr 0.0352338 *
## Persuasion:immigrant2 0.4115735
## Persuasion:educ    0.3247525
## Persuasion:religpew2 0.0862037 .
## Persuasion:religpew3 0.7971900
## Persuasion:religpew4 0.5142302
## Persuasion:religpew5 0.2556134
## Persuasion:religpew6 0.7152688
## Persuasion:religpew7 0.7650286
## Persuasion:religpew9 0.4285490
## Persuasion:religpew10 0.1460440
## Persuasion:religpew11 0.1464795
## Persuasion:religpew12 0.6874601
## Persuasion:partyid3_namesIndependent 0.0681716 .
## Persuasion:partyid3_namesNot Sure 0.3617694
## Persuasion:partyid3_namesOther 0.3493043
## Persuasion:partyid3_namesRepublican 0.5449738
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

No statistically significant effect of Persuasion:num\_muslim on Y6.

## Additional hypotheses: robustness checks and verifications: H7a - H15c

### H7a: (Y1)

Given a choice between choosing a Christian refugee profile versus a Muslim refugee profile, respondents are on average more likely to prefer the Christian refugee profile. We first subset the data `data.y1` to profile pairs where a Christian profile is compared against a Muslim profile (h7a) and use only observations from the Control group.

```
##
## t test of coefficients:
##
##           Estimate Std. Error t value Pr(>|t|)
## (Intercept) 0.5371885 0.0052133 103.0420 < 2.2e-16 ***
## Rmuslim     -0.0740753 0.0103374 -7.1657 8.242e-13 ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

##
## t test of coefficients:
##
##           Estimate Std. Error t value Pr(>|t|)
## (Intercept)      5.1683e-01 4.8699e-02 10.6127 < 2.2e-16 ***
## Rmuslim          -7.4236e-02 1.0371e-02 -7.1581 8.711e-13 ***
## gender          -3.3641e-04 7.9492e-04 -0.4232 0.67216
## birthyr1        1.0808e-05 2.4894e-05 0.4342 0.66419
```

```
## immigrant2          -4.2571e-04  8.3333e-04 -0.5109  0.60946
## educ1               -2.1082e-05  2.7764e-04 -0.0759  0.93947
## religpew2          -1.1161e-03  1.0996e-03 -1.0150  0.31013
## religpew3          -1.1952e-03  2.8951e-03 -0.4128  0.67974
## religpew4          -1.7683e-03  5.7733e-03 -0.3063  0.75939
## religpew5           1.6971e-03  3.3024e-03  0.5139  0.60733
## religpew6          -3.8087e-03  3.7774e-03 -1.0083  0.31334
## religpew7          -7.0084e-03  3.8380e-03 -1.8261  0.06787 .
## religpew8          -8.8874e-03  7.0234e-03 -1.2654  0.20575
## religpew9          -4.7722e-03  1.9547e-03 -2.4413  0.01465 *
## religpew10         -1.3973e-03  1.7787e-03 -0.7856  0.43211
## religpew11         -4.8185e-04  1.1133e-03 -0.4328  0.66516
## religpew12         -1.4618e-03  1.6242e-03 -0.9000  0.36814
## partyid3_namesIndependent  1.1009e-03  9.7227e-04  1.1323  0.25753
## partyid3_namesNot Sure -1.8517e-03  1.7458e-03 -1.0606  0.28887
## partyid3_namesOther   -6.8193e-03  3.4818e-03 -1.9585  0.05019 .
## partyid3_namesRepublican -6.6566e-04  1.0177e-03 -0.6541  0.51307
## ethnocentric2       8.5891e-04  1.0914e-03  0.7869  0.43133
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

There exists a Muslim penalty – respondents in the Control group are less likely (-0.0740753) to choose a profile if it is Muslim than if it is Christian.

## H7b:

Respondents will give lower admission scores on average to Muslim refugees relative to Christian refugees (“Muslim penalty”). We consider only the Control group, for wave 1.

```
##
## t test of coefficients:
##
##               Estimate Std. Error t value Pr(>|t|)
## (Intercept)      5.508629   0.123255  44.6930 < 2.2e-16
## muslim          -0.331071   0.123334  -2.6843  0.007275
## sex              0.054035   0.048063   1.1243  0.260918
## birthyr          0.182685   0.045733   3.9946  6.508e-05
## educ             0.191625   0.047222   4.0580  4.973e-05
## religpew2        -0.118529   0.138898  -0.8534  0.393476
## religpew3         0.124630   0.391174   0.3186  0.750030
## religpew4        -0.191200   0.368799  -0.5184  0.604158
## religpew5        -0.146311   0.355560  -0.4115  0.680715
## religpew6         0.232535   0.582580   0.3991  0.689790
## religpew7         0.479981   0.264088   1.8175  0.069158
## religpew8        -0.012716   0.148215  -0.0858  0.931630
## religpew9         0.319137   0.188194   1.6958  0.089945
## religpew10       -0.084545   0.201975  -0.4186  0.675521
## religpew11       -0.261358   0.136664  -1.9124  0.055842
## religpew12       -0.164706   0.201437  -0.8177  0.413566
## partyid3_namesIndependent -0.694739   0.109015  -6.3729  1.905e-10
## partyid3_namesNot Sure -0.873967   0.213261  -4.0981  4.186e-05
## partyid3_namesOther   -1.023356   0.605975  -1.6888  0.091282
## partyid3_namesRepublican -1.205722   0.128100  -9.4124 < 2.2e-16
## ethnocentric1     -0.312699   0.058788  -5.3191  1.057e-07
## immigrant2       -0.146709   0.100736  -1.4564  0.145310
## muslim:sex        -0.058251   0.047683  -1.2216  0.221859
## muslim:birthyr    -0.013096   0.044981  -0.2911  0.770950
```

## muslim:educ	-0.038724	0.047146	-0.8214	0.411453
## muslim:religpew2	0.171703	0.136698	1.2561	0.209106
## muslim:religpew3	0.055288	0.365007	0.1515	0.879607
## muslim:religpew4	0.374560	0.522989	0.7162	0.473884
## muslim:religpew5	0.275177	0.372554	0.7386	0.460146
## muslim:religpew6	0.301073	0.476313	0.6321	0.527336
## muslim:religpew7	0.341505	0.299189	1.1414	0.253706
## muslim:religpew8	1.754119	0.262641	6.6788	2.488e-11
## muslim:religpew9	-0.072377	0.186822	-0.3874	0.698458
## muslim:religpew10	0.512431	0.201273	2.5459	0.010907
## muslim:religpew11	0.259126	0.136236	1.9020	0.057184
## muslim:religpew12	0.494649	0.178311	2.7741	0.005542
## muslim:partyid3_namesIndependent	-0.086306	0.106865	-0.8076	0.419319
## muslim:partyid3_namesNot Sure	0.073745	0.233385	0.3160	0.752021
## muslim:partyid3_namesOther	0.168580	0.404179	0.4171	0.676616
## muslim:partyid3_namesRepublican	-0.098761	0.125891	-0.7845	0.432763
## muslim:ethnocentric1	-0.048373	0.056819	-0.8513	0.394590
## muslim:immigrant2	-0.042995	0.099551	-0.4319	0.665830
##				
## (Intercept)	***			
## muslim	**			
## sex				
## birthyr	***			
## educ	***			
## religpew2				
## religpew3				
## religpew4				
## religpew5				
## religpew6				
## religpew7	.			
## religpew8				
## religpew9	.			
## religpew10				
## religpew11	.			
## religpew12				
## partyid3_namesIndependent	***			
## partyid3_namesNot Sure	***			
## partyid3_namesOther	.			
## partyid3_namesRepublican	***			
## ethnocentric1	***			
## immigrant2				
## muslim:sex				
## muslim:birthyr				
## muslim:educ				
## muslim:religpew2				
## muslim:religpew3				
## muslim:religpew4				
## muslim:religpew5				
## muslim:religpew6				
## muslim:religpew7				
## muslim:religpew8	***			
## muslim:religpew9				
## muslim:religpew10	*			
## muslim:religpew11	.			
## muslim:religpew12	**			
## muslim:partyid3_namesIndependent				
## muslim:partyid3_namesNot Sure				



```
## muslim:partyid3_namesOther
## muslim:partyid3_namesRepublican
## muslim:ethnocentric1
## muslim:immigrant2
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

We see that there is a highly significant and negative muslim effect (-0.33, pvalue=0.007275; does not pass Bonferonni correction of  $0.05/11=0.004545455$ ). Respondents are more likely to give higher scores to Christian refugees compared to Muslim ones.

### H7c:

The likelihood of respondents sending an anonymous letter to the White House is negatively correlated with the number of Muslim refugee profiles presented to them. (data, using explanatory variable `num_muslim`, wave 1).

```
##
## t test of coefficients:
##
##               Estimate Std. Error t value
## (Intercept)      0.26190477  0.02029486 12.9050
## num_muslim      -0.00637267  0.02089259 -0.3050
## sex              -0.00016173  0.00713001 -0.0227
## birthyr         -0.00040181  0.00746487 -0.0538
## educ             0.04885691  0.00773914  6.3130
## religpew2        0.01365458  0.01993756  0.6849
## religpew3        0.04044545  0.06075186  0.6657
## religpew4       -0.05307320  0.05806416 -0.9140
## religpew5        0.09228459  0.05045478  1.8291
## religpew6       -0.06644786  0.05670203 -1.1719
## religpew7        0.22064765  0.07674329  2.8751
## religpew8        0.21755696  0.15284202  1.4234
## religpew9        0.11736842  0.03648616  3.2168
## religpew10       0.07228386  0.03527508  2.0491
## religpew11      -0.01633954  0.01867149 -0.8751
## religpew12       0.11088818  0.03480228  3.1862
## partyid3_namesIndependent -0.07828019  0.01826985 -4.2847
## partyid3_namesNot Sure   -0.13210695  0.02498561 -5.2873
## partyid3_namesOther     -0.09643203  0.08989142 -1.0728
## partyid3_namesRepublican -0.16249881  0.01670858 -9.7255
## ethnocentric1         -0.07009731  0.00711513 -9.8519
## family_income        -0.00085479  0.00019701 -4.3389
## immigrant2          -0.01849597  0.01538172 -1.2025
## num_muslim:sex        -0.01023048  0.00708513 -1.4439
## num_muslim:birthyr     0.00190018  0.00744174  0.2553
## num_muslim:educ       0.01818368  0.00751232  2.4205
## num_muslim:religpew2   0.01854876  0.02102818  0.8821
## num_muslim:religpew3   0.04602259  0.10566322  0.4356
## num_muslim:religpew4   0.00798942  0.03158013  0.2530
## num_muslim:religpew5  -0.08505811  0.04215208 -2.0179
## num_muslim:religpew6  -0.05656831  0.07873006 -0.7185
## num_muslim:religpew7   0.18333852  0.06819201  2.6886
## num_muslim:religpew8  -0.29363595  0.09754220 -3.0103
## num_muslim:religpew9   0.05400647  0.03600216  1.5001
## num_muslim:religpew10  0.02722685  0.03381194  0.8052
## num_muslim:religpew11  0.00171423  0.01949711  0.0879
## num_muslim:religpew12  0.06306439  0.03257445  1.9360
```

```

## num_muslim:partyid3_namesIndependent -0.02754978 0.01805745 -1.5257
## num_muslim:partyid3_namesNot Sure -0.01641348 0.02655366 -0.6181
## num_muslim:partyid3_namesOther 0.05898146 0.07024815 0.8396
## num_muslim:partyid3_namesRepublican 0.00474262 0.01661266 0.2855
## num_muslim:ethnocentric1 -0.00019895 0.00699784 -0.0284
## num_muslim:family_income -0.00011276 0.00016457 -0.6852
## num_muslim:immigrant2 0.00817213 0.01558375 0.5244
## Pr(>|t|)
## (Intercept) < 2.2e-16 ***
## num_muslim 0.760374
## sex 0.981905
## birthyr 0.957077
## educ 3.198e-10 ***
## religpew2 0.493488
## religpew3 0.505630
## religpew4 0.360777
## religpew5 0.067503 .
## religpew6 0.241351
## religpew7 0.004071 **
## religpew8 0.154735
## religpew9 0.001312 **
## religpew10 0.040546 *
## religpew11 0.381595
## religpew12 0.001458 **
## partyid3_namesIndependent 1.895e-05 ***
## partyid3_namesNot Sure 1.342e-07 ***
## partyid3_namesOther 0.283476
## partyid3_namesRepublican < 2.2e-16 ***
## ethnocentric1 < 2.2e-16 ***
## family_income 1.486e-05 ***
## immigrant2 0.229291
## num_muslim:sex 0.148875
## num_muslim:birthyr 0.798479
## num_muslim:educ 0.015565 *
## num_muslim:religpew2 0.377808
## num_muslim:religpew3 0.663192
## num_muslim:religpew4 0.800296
## num_muslim:religpew5 0.043703 *
## num_muslim:religpew6 0.472506
## num_muslim:religpew7 0.007221 **
## num_muslim:religpew8 0.002634 **
## num_muslim:religpew9 0.133710
## num_muslim:religpew10 0.420751
## num_muslim:religpew11 0.929945
## num_muslim:religpew12 0.052973 .
## num_muslim:partyid3_namesIndependent 0.127210
## num_muslim:partyid3_namesNot Sure 0.536546
## num_muslim:partyid3_namesOther 0.401199
## num_muslim:partyid3_namesRepublican 0.775297
## num_muslim:ethnocentric1 0.977321
## num_muslim:family_income 0.493282
## num_muslim:immigrant2 0.600044
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

No statistically significant effect of num\_muslim on Y6.

## H8a: HTE empathy with Muslim profile on Y2 over time

The heterogeneous effect of the empathy treatment with the ratings of a Muslim refugee profile compared to a Christian refugee profile may degrade in magnitude over time but will persist. We subset h7b to only respondents who answered dependent variable questions in Wave 2 (Treatment\_Group==2 and Treatment\_Group==4) and call this h8a.

```
##
## t test of coefficients:
##
##
```

	Estimate	Std. Error	t value
## (Intercept)	5.34958154	0.12424898	43.0553
## Empathy	-0.05456132	0.21456264	-0.2543
## muslim	-0.23887342	0.06015451	-3.9710
## sex	-0.09328682	0.04050111	-2.3033
## birthyr	0.16610306	0.04277866	3.8828
## educ	0.13662851	0.03937485	3.4699
## religpew2	-0.01876714	0.11614978	-0.1616
## religpew3	0.17416834	0.23375597	0.7451
## religpew4	0.63968845	0.52119832	1.2273
## religpew5	0.04190857	0.27904153	0.1502
## religpew6	1.81662971	0.28534040	6.3665
## religpew7	0.34341536	0.42069505	0.8163
## religpew8	1.19358071	0.34703367	3.4394
## religpew9	0.54549067	0.17711723	3.0798
## religpew10	0.34160094	0.16970799	2.0129
## religpew11	0.09675868	0.11993923	0.8067
## religpew12	0.05281738	0.17764418	0.2973
## partyid3_namesIndependent	-0.85397334	0.09820930	-8.6954
## partyid3_namesNot Sure	-1.06919841	0.18565642	-5.7590
## partyid3_namesOther	-1.06953667	0.33749597	-3.1690
## partyid3_namesRepublican	-1.31626463	0.10462984	-12.5802
## ethnocentric1	-0.43549092	0.04915635	-8.8593
## family_income	-0.00108070	0.00134503	-0.8035
## immigrant2	-0.25115625	0.08665924	-2.8982
## Empathy:muslim	-0.00678338	0.09730934	-0.0697
## Empathy:sex	0.12605250	0.07070773	1.7827
## Empathy:birthyr	-0.01038378	0.07305482	-0.1421
## Empathy:educ	-0.03642459	0.07187616	-0.5068
## Empathy:religpew2	0.16827757	0.20082507	0.8379
## Empathy:religpew3	0.62217328	0.44392768	1.4015
## Empathy:religpew4	-1.12917282	0.84055748	-1.3434
## Empathy:religpew5	-0.15284056	0.49486787	-0.3089
## Empathy:religpew6	-1.37004427	0.77845247	-1.7600
## Empathy:religpew7	0.37499558	0.63453632	0.5910
## Empathy:religpew8	0.48641493	0.39071031	1.2450
## Empathy:religpew9	0.24628403	0.30431381	0.8093
## Empathy:religpew10	0.23072534	0.28820806	0.8006
## Empathy:religpew11	-0.23329261	0.20488691	-1.1386
## Empathy:religpew12	-0.04267866	0.31598379	-0.1351
## Empathy:partyid3_namesIndependent	-0.05383595	0.16984457	-0.3170
## Empathy:partyid3_namesNot Sure	0.08688909	0.30566948	0.2843
## Empathy:partyid3_namesOther	0.21743090	0.63557448	0.3421
## Empathy:partyid3_namesRepublican	0.20554154	0.18143089	1.1329
## Empathy:ethnocentric1	0.01925436	0.08230030	0.2340
## Empathy:family_income	-0.00098989	0.00239149	-0.4139
## Empathy:immigrant2	0.03636713	0.15203253	0.2392

```

##                                Pr(>|t|)
## (Intercept)                   < 2.2e-16 ***
## Empathy                       0.7992741
## muslim                        7.188e-05 ***
## sex                           0.0212737 *
## birthyr                       0.0001037 ***
## educ                          0.0005219 ***
## religpew2                     0.8716410
## religpew3                     0.4562305
## religpew4                     0.2197121
## religpew5                     0.8806185
## religpew6                     1.986e-10 ***
## religpew7                     0.4143379
## religpew8                     0.0005845 ***
## religpew9                     0.0020747 **
## religpew10                    0.0441444 *
## religpew11                    0.4198334
## religpew12                    0.7662251
## partyid3_namesIndependent     < 2.2e-16 ***
## partyid3_namesNot Sure       8.614e-09 ***
## partyid3_namesOther          0.0015323 **
## partyid3_namesRepublican     < 2.2e-16 ***
## ethnocentric1                < 2.2e-16 ***
## family_income                0.4217109
## immigrant2                   0.0037581 **
## Empathy:muslim               0.9444258
## Empathy:sex                  0.0746497 .
## Empathy:birthyr             0.8869737
## Empathy:educ                 0.6123240
## Empathy:religpew2            0.4020818
## Empathy:religpew3            0.1610780
## Empathy:religpew4            0.1791737
## Empathy:religpew5            0.7574387
## Empathy:religpew6            0.0784337 .
## Empathy:religpew7            0.5545449
## Empathy:religpew8            0.2131681
## Empathy:religpew9            0.4183491
## Empathy:religpew10           0.4234032
## Empathy:religpew11           0.2548698
## Empathy:religpew12           0.8925614
## Empathy:partyid3_namesIndependent 0.7512690
## Empathy:partyid3_namesNot Sure 0.7762161
## Empathy:partyid3_namesOther 0.7322791
## Empathy:partyid3_namesRepublican 0.2572766
## Empathy:ethnocentric1        0.8150249
## Empathy:family_income        0.6789379
## Empathy:immigrant2           0.8109487
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

No statistically significant effect of Empathy:muslim on Y2 in long-run.

### H8b: HTE information with Muslim profile on Y2 over time

The heterogeneous effect of the persuasion treatment with the ratings of a Muslim refugee profile compared to a Christian refugee profile may degrade in magnitude over time but will persist. We subset h7b to only respondents who answered dependent variable questions in Wave 2 (Treatment\_Group==2 and Treatment\_Group==6) and call

this h8b.

```
##
## t test of coefficients:
##
##               Estimate Std. Error t value
## (Intercept)      5.2715365  0.1262951  41.7398
## Persuasion        0.1606694  0.2112394   0.7606
## muslim          -0.2344236  0.0563393  -4.1609
## sex              -0.0093987  0.0405773  -0.2316
## birthyr          0.0946121  0.0426753   2.2170
## educ             0.1328445  0.0411189   3.2307
## religpew2         0.0094147  0.1167456   0.0806
## religpew3         0.4766354  0.2933961   1.6245
## religpew4        -0.3225046  0.5052685  -0.6383
## religpew5        -0.0512448  0.3041725  -0.1685
## religpew6         1.4391389  0.4190569   3.4342
## religpew7         0.5030919  0.4243851   1.1855
## religpew8         0.9968106  0.3050928   3.2672
## religpew9         0.7681299  0.1695796   4.5296
## religpew10        0.5428761  0.1691340   3.2097
## religpew11        0.0456370  0.1173281   0.3890
## religpew12        0.1589571  0.1726820   0.9205
## partyid3_namesIndependent -0.9108934  0.0978567  -9.3084
## partyid3_namesNot Sure  -1.0432165  0.1804130  -5.7824
## partyid3_namesOther    -1.0247852  0.3813019  -2.6876
## partyid3_namesRepublican -1.2422540  0.1063382 -11.6821
## ethnocentric1        -0.4418774  0.0503525  -8.7757
## family_income        -0.0016175  0.0013597  -1.1896
## immigrant2          -0.1872933  0.0881437  -2.1249
## Persuasion:muslim    -0.0130820  0.1035080  -0.1264
## Persuasion:sex       -0.1349028  0.0716345  -1.8832
## Persuasion:birthyr    0.2005406  0.0723775   2.7708
## Persuasion:educ      -0.0266613  0.0694572  -0.3839
## Persuasion:religpew2   0.0341186  0.2005727   0.1701
## Persuasion:religpew3  -0.2576086  0.3964571  -0.6498
## Persuasion:religpew4   1.3417079  0.8163119   1.6436
## Persuasion:religpew5   0.0527132  0.4897868   0.1076
## Persuasion:religpew6   0.1358373  0.5473993   0.2482
## Persuasion:religpew7  -0.1644280  0.6667697  -0.2466
## Persuasion:religpew8   0.4074412  0.4255620   0.9574
## Persuasion:religpew9  -0.4769576  0.3179053  -1.5003
## Persuasion:religpew10 -0.3631092  0.2825111  -1.2853
## Persuasion:religpew11 -0.1182161  0.2103093  -0.5621
## Persuasion:religpew12 -0.3536118  0.3223023  -1.0971
## Persuasion:partyid3_namesIndependent 0.1575180  0.1720581   0.9155
## Persuasion:partyid3_namesNot Sure    0.0802420  0.3249570   0.2469
## Persuasion:partyid3_namesOther       0.1575085  0.5946397   0.2649
## Persuasion:partyid3_namesRepublican -0.0099893  0.1807084  -0.0553
## Persuasion:ethnocentric1  0.0322377  0.0812341   0.3968
## Persuasion:family_income  0.0007913  0.0023270   0.3401
## Persuasion:immigrant2    -0.1476718  0.1497490  -0.9861
##               Pr(>|t|)
## (Intercept)      < 2.2e-16 ***
## Persuasion        0.4469051
## muslim            3.186e-05 ***
## sex               0.8168324
```

```

## birthyr 0.0266353 *
## educ 0.0012372 **
## religpew2 0.9357271
## religpew3 0.1042788
## religpew4 0.5232981
## religpew5 0.8662135
## religpew6 0.0005957 ***
## religpew7 0.2358527
## religpew8 0.0010883 **
## religpew9 5.952e-06 ***
## religpew10 0.0013312 **
## religpew11 0.6973042
## religpew12 0.3573153
## partyid3_namesIndependent < 2.2e-16 ***
## partyid3_namesNot Sure 7.501e-09 ***
## partyid3_namesOther 0.0072042 **
## partyid3_namesRepublican < 2.2e-16 ***
## ethnocentric1 < 2.2e-16 ***
## family_income 0.2342104
## immigrant2 0.0336132 *
## Persuasion:muslim 0.8994274
## Persuasion:sex 0.0596897 .
## Persuasion:birthyr 0.0055990 **
## Persuasion:educ 0.7010938
## Persuasion:religpew2 0.8649288
## Persuasion:religpew3 0.5158457
## Persuasion:religpew4 0.1002738
## Persuasion:religpew5 0.9142947
## Persuasion:religpew6 0.8040213
## Persuasion:religpew7 0.8052179
## Persuasion:religpew8 0.3383700
## Persuasion:religpew9 0.1335527
## Persuasion:religpew10 0.1987088
## Persuasion:religpew11 0.5740517
## Persuasion:religpew12 0.2725952
## Persuasion:partyid3_namesIndependent 0.3599465
## Persuasion:partyid3_namesNot Sure 0.8049646
## Persuasion:partyid3_namesOther 0.7911049
## Persuasion:partyid3_namesRepublican 0.9559174
## Persuasion:ethnocentric1 0.6914837
## Persuasion:family_income 0.7338214
## Persuasion:immigrant2 0.3240848
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

No statistically significant effect of Persuasion:muslim on Y2 in long-run.

### H9a: HTE empathy with Muslim profile on Y6 over time

The heterogeneous effect of the empathy treatment with seeing Muslim refugee profiles on sending an anonymous letter to the White House may degrade in magnitude over time but will persist. We use `ControlEmpathy.data.w2`.

```

##
## t test of coefficients:
##
##               Estimate Std. Error t value
## (Intercept)  0.33922740  0.03948787  8.5907

```

## Empathy	-0.00334548	0.05587834	-0.0599
## num_muslim	-0.01161878	0.01275176	-0.9112
## sex	0.00360180	0.01268534	0.2839
## birthyr	-0.03620127	0.01392993	-2.5988
## educ	0.04766359	0.01424355	3.3463
## religpew2	-0.02820561	0.03312633	-0.8515
## religpew3	-0.06943222	0.08177506	-0.8491
## religpew4	-0.13978230	0.09621077	-1.4529
## religpew5	0.05207671	0.12147380	0.4287
## religpew6	0.31673865	0.14818715	2.1374
## religpew7	0.47437564	0.12826106	3.6985
## religpew8	0.04863184	0.07213250	0.6742
## religpew9	0.18203026	0.06612618	2.7528
## religpew10	0.13746488	0.07135603	1.9265
## religpew11	0.01329726	0.03666003	0.3627
## religpew12	0.06382391	0.05178979	1.2324
## partyid3_namesIndependent	-0.14930575	0.03313908	-4.5054
## partyid3_namesNot Sure	-0.17659566	0.05133619	-3.4400
## partyid3_namesOther	0.07612700	0.14431370	0.5275
## partyid3_namesRepublican	-0.22950547	0.03163252	-7.2554
## ethnocentric1	-0.07768931	0.01356057	-5.7291
## family_income	-0.00039371	0.00036559	-1.0769
## immigrant2	-0.07019842	0.02859126	-2.4552
## Empathy:num_muslim	-0.00434440	0.01764012	-0.2463
## Empathy:sex	0.00617744	0.01816812	0.3400
## Empathy:birthyr	0.03333376	0.01965024	1.6964
## Empathy:educ	0.00115944	0.01962591	0.0591
## Empathy:religpew2	0.02598297	0.04895778	0.5307
## Empathy:religpew3	0.07737720	0.13430055	0.5761
## Empathy:religpew4	0.32952440	0.18257420	1.8049
## Empathy:religpew5	-0.04077284	0.14679791	-0.2777
## Empathy:religpew6	-0.25823682	0.23157303	-1.1151
## Empathy:religpew7	-0.25746728	0.22643357	-1.1371
## Empathy:religpew8	-0.29968793	0.08349346	-3.5894
## Empathy:religpew9	-0.10308482	0.09443842	-1.0916
## Empathy:religpew10	-0.09850097	0.09507233	-1.0361
## Empathy:religpew11	-0.05257388	0.04948850	-1.0623
## Empathy:religpew12	-0.01000089	0.07959945	-0.1256
## Empathy:partyid3_namesIndependent	0.04517337	0.04817332	0.9377
## Empathy:partyid3_namesNot Sure	-0.05924938	0.06558930	-0.9033
## Empathy:partyid3_namesOther	-0.11277412	0.19159754	-0.5886
## Empathy:partyid3_namesRepublican	-0.00518412	0.04421663	-0.1172
## Empathy:ethnocentric1	-0.00407951	0.01965416	-0.2076
## Empathy:family_income	-0.00043884	0.00051568	-0.8510
## Empathy:immigrant2	0.05328794	0.04068115	1.3099
##	Pr(> t )		
## (Intercept)	< 2.2e-16	***	
## Empathy	0.9522654		
## num_muslim	0.3623409		
## sex	0.7764945		
## birthyr	0.0094331	**	
## educ	0.0008362	***	
## religpew2	0.3946324		
## religpew3	0.3959618		
## religpew4	0.1464371		
## religpew5	0.6681888		
## religpew6	0.0327015	*	

```

## religpew7          0.0002235 ***
## religpew8          0.5002720
## religpew9          0.0059702 **
## religpew10         0.0542078 .
## religpew11         0.7168592
## religpew12         0.2179780
## partyid3_namesIndependent 7.061e-06 ***
## partyid3_namesNot Sure 0.0005954 ***
## partyid3_namesOther 0.5979058
## partyid3_namesRepublican 5.987e-13 ***
## ethnocentric1      1.186e-08 ***
## family_income      0.2816708
## immigrant2         0.0141755 *
## Empathy:num_muslim 0.8054949
## Empathy:sex        0.7338855
## Empathy:birthyr    0.0899963 .
## Empathy:educ       0.9528974
## Empathy:religpew2  0.5956787
## Empathy:religpew3  0.5645880
## Empathy:religpew4  0.0712650 .
## Empathy:religpew5  0.7812385
## Empathy:religpew6  0.2649423
## Empathy:religpew7  0.2556709
## Empathy:religpew8  0.0003406 ***
## Empathy:religpew9  0.2751782
## Empathy:religpew10 0.3003153
## Empathy:religpew11 0.2882251
## Empathy:religpew12 0.9000312
## Empathy:partyid3_namesIndependent 0.3485144
## Empathy:partyid3_namesNot Sure 0.3664700
## Empathy:partyid3_namesOther 0.5562061
## Empathy:partyid3_namesRepublican 0.9066803
## Empathy:ethnocentric1 0.8355930
## Empathy:family_income 0.3948949
## Empathy:immigrant2 0.1904037
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

No statistically significant effect of Empathy:num\_muslim on Y6 over time. ### H9b: HTE information with Muslim number on Y6 over time The heterogeneous effect of the persuasion treatment with seeing Muslim refugee profiles on sending an anonymous letter to the White House may degrade in magnitude over time but will persist. We use ControlPersuasion.data.w2.

```

##
## t test of coefficients:
##
##               Estimate Std. Error t value Pr(>|t|)
## (Intercept)    0.30733583 0.01890184 16.2596 < 2.2e-16 ***
## num_muslim     -0.00789455 0.00613628 -1.2865 0.1983395
## sex            0.00349044 0.00629713  0.5543 0.5794148
## birthyr       -0.01574015 0.00675768 -2.3292 0.0199026 *
## educ          0.04769577 0.00684600  6.9670 3.838e-12 ***
## religpew2      0.00433887 0.01733127  0.2503 0.8023316
## religpew3      0.01043903 0.04871181  0.2143 0.8303239
## religpew4      0.01756224 0.06343154  0.2769 0.7818965
## religpew5      0.07648898 0.04684218  1.6329 0.1025763
## religpew6      0.10950639 0.07883299  1.3891 0.1648908
## religpew7      0.28971089 0.07932636  3.6521 0.0002638 ***

```



```

## religpew8          0.02637299  0.11887388   0.2219 0.8244379
## religpew9          0.14056107  0.03304945   4.2531 2.163e-05 ***
## religpew10         0.09085241  0.03151239   2.8831 0.0039617 **
## religpew11        -0.00836958  0.01685452  -0.4966 0.6195172
## religpew12         0.07880215  0.02871005   2.7448 0.0060858 **
## partyid3_namesIndependent -0.10175818  0.01665395  -6.1102 1.102e-09 ***
## partyid3_namesNot Sure  -0.17147134  0.02255981  -7.6007 3.738e-14 ***
## partyid3_namesOther    0.03356281  0.08495373   0.3951 0.6928136
## partyid3_namesRepublican -0.19963347  0.01522822 -13.1094 < 2.2e-16 ***
## ethnocentric1       -0.07681943  0.00673032 -11.4139 < 2.2e-16 ***
## family_income       -0.00078932  0.00017713  -4.4561 8.601e-06 ***
## immigrant2          -0.04013853  0.01391859  -2.8838 0.0039525 **
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

No statistical significant effect of Persuasion:num\_muslim on Y6.

### H10a: (Heterogeneous effect of empathy and Muslim: screening)

The empathy prime combined with seeing Muslim refugee profiles will be correlated with a higher likelihood of favoring the U.S. taking in Syrian refugees who pass a government security screening relative to the control, controlling for the number of Muslim refugee profiles seen. We use `ControlEmpathy.data` for wave 1, `ControlEmpathy.data.w1`.

```

##
## t test of coefficients:
##
##              Estimate Std. Error t value
## (Intercept)    7.3745e-01  4.2323e-02 17.4242
## Empathy        1.0344e-01  5.5897e-02  1.8505
## num_muslim    -4.6146e-03  1.4655e-02 -0.3149
## sex           8.9086e-05  1.4690e-02  0.0061
## birthyr       1.6802e-02  1.4431e-02  1.1643
## immigrant2    -3.4495e-02  3.2300e-02 -1.0680
## educ          3.1121e-02  1.5093e-02  2.0620
## religpew2     4.5450e-02  4.5976e-02  0.9886
## religpew3     1.1467e-01  1.1216e-01  1.0223
## religpew4     9.3100e-02  1.9319e-01  0.4819
## religpew5     8.6393e-02  8.3684e-02  1.0324
## religpew6    -1.2150e-01  2.9123e-01 -0.4172
## religpew7     1.2373e-01  1.8536e-01  0.6675
## religpew8     6.5867e-01  4.8455e-02 13.5934
## religpew9     2.1851e-01  5.4366e-02  4.0192
## religpew10    1.7721e-01  5.2168e-02  3.3969
## religpew11    7.5806e-02  4.3895e-02  1.7270
## religpew12    1.7961e-01  6.6169e-02  2.7144
## partyid3_namesIndependent -2.2060e-01  3.4054e-02 -6.4779
## partyid3_namesNot Sure  -1.8091e-01  7.1834e-02 -2.5184
## partyid3_namesOther    -3.6853e-01  2.6157e-01 -1.4089
## partyid3_namesRepublican -3.8689e-01  4.1040e-02 -9.4271
## ethnocentric1    -8.2273e-02  1.7461e-02 -4.7118
## Empathy:num_muslim    -2.5937e-02  2.0563e-02 -1.2613
## Empathy:sex         2.9214e-04  2.0696e-02  0.0141
## Empathy:birthyr     4.3801e-02  2.0683e-02  2.1178
## Empathy:immigrant2   6.6212e-03  4.4466e-02  0.1489
## Empathy:educ        1.2144e-02  2.0848e-02  0.5825
## Empathy:religpew2   -9.5571e-02  6.2724e-02 -1.5237
## Empathy:religpew3    3.0823e-02  1.5599e-01  0.1976

```

## Empathy:religpew4	-5.2714e-01	2.4133e-01	-2.1843
## Empathy:religpew5	-2.4641e-03	1.2833e-01	-0.0192
## Empathy:religpew6	2.6815e-01	3.1059e-01	0.8634
## Empathy:religpew7	-4.6967e-02	2.0497e-01	-0.2291
## Empathy:religpew8	-5.4040e-01	1.2104e-01	-4.4648
## Empathy:religpew9	-2.4934e-01	7.7294e-02	-3.2259
## Empathy:religpew10	-1.3424e-01	7.6390e-02	-1.7573
## Empathy:religpew11	-8.5455e-02	6.0474e-02	-1.4131
## Empathy:religpew12	-1.8840e-01	9.0080e-02	-2.0915
## Empathy:partyid3_namesIndependent	3.6057e-02	4.7168e-02	0.7644
## Empathy:partyid3_namesNot Sure	-9.4758e-03	9.7779e-02	-0.0969
## Empathy:partyid3_namesOther	4.6424e-02	3.3146e-01	0.1401
## Empathy:partyid3_namesRepublican	-1.3538e-02	5.7030e-02	-0.2374
## Empathy:ethnocentric1	-2.3937e-02	2.3385e-02	-1.0236
##	Pr(> t )		
## (Intercept)	< 2.2e-16 ***		
## Empathy	0.0644139 .		
## num_muslim	0.7528844		
## sex	0.9951620		
## birthyr	0.2444576		
## immigrant2	0.2856854		
## educ	0.0393533 *		
## religpew2	0.3230150		
## religpew3	0.3067631		
## religpew4	0.6299250		
## religpew5	0.3020357		
## religpew6	0.6765902		
## religpew7	0.5045242		
## religpew8	< 2.2e-16 ***		
## religpew9	6.086e-05 ***		
## religpew10	0.0006969 ***		
## religpew11	0.0843478 .		
## religpew12	0.0067052 **		
## partyid3_namesIndependent	1.205e-10 ***		
## partyid3_namesNot Sure	0.0118763 *		
## partyid3_namesOther	0.1590443		
## partyid3_namesRepublican	< 2.2e-16 ***		
## ethnocentric1	2.649e-06 ***		
## Empathy:num_muslim	0.2073534		
## Empathy:sex	0.9887391		
## Empathy:birthyr	0.0343363 *		
## Empathy:immigrant2	0.8816458		
## Empathy:educ	0.5602891		
## Empathy:religpew2	0.1277706		
## Empathy:religpew3	0.8433815		
## Empathy:religpew4	0.0290734 *		
## Empathy:religpew5	0.9846825		
## Empathy:religpew6	0.3880613		
## Empathy:religpew7	0.8187845		
## Empathy:religpew8	8.525e-06 ***		
## Empathy:religpew9	0.0012788 **		
## Empathy:religpew10	0.0790364 .		
## Empathy:religpew11	0.1578039		
## Empathy:religpew12	0.0366278 *		
## Empathy:partyid3_namesIndependent	0.4447098		
## Empathy:partyid3_namesNot Sure	0.9228084		
## Empathy:partyid3_namesOther	0.8886275		

```
## Empathy:partyid3_namesRepublican 0.8123897
## Empathy:ethnocentric1 0.3061688
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

No statistically significant effect of Empathy:num\_muslim on Y4.

### H10b: (Heterogeneous effect of persuasion and Muslim: screening)

The persuasion prime combined with seeing Muslim refugees profile will be correlated with a higher likelihood of favoring the U.S. taking in Syrian refugees who pass a government security screening than in the control, controlling for the number of Muslim refugee profiles seen. We use ControlPersuasion.data.w1.

```
##
## t test of coefficients:
##
##               Estimate Std. Error t value
## (Intercept)      7.3745e-01 4.2323e-02 17.4242
## Persuasion        3.4614e-02 5.6860e-02  0.6088
## num_muslim      -4.6146e-03 1.4655e-02 -0.3149
## sex              8.9086e-05 1.4690e-02  0.0061
## birthyr          1.6802e-02 1.4431e-02  1.1643
## immigrant2      -3.4495e-02 3.2300e-02 -1.0680
## educ             3.1121e-02 1.5093e-02  2.0620
## religpew2        4.5450e-02 4.5976e-02  0.9886
## religpew3        1.1467e-01 1.1216e-01  1.0223
## religpew4        9.3100e-02 1.9319e-01  0.4819
## religpew5        8.6393e-02 8.3684e-02  1.0324
## religpew6       -1.2150e-01 2.9123e-01 -0.4172
## religpew7        1.2373e-01 1.8536e-01  0.6675
## religpew8        6.5867e-01 4.8455e-02 13.5934
## religpew9        2.1851e-01 5.4366e-02  4.0192
## religpew10       1.7721e-01 5.2168e-02  3.3969
## religpew11       7.5806e-02 4.3895e-02  1.7270
## religpew12       1.7961e-01 6.6169e-02  2.7144
## partyid3_namesIndependent -2.2060e-01 3.4054e-02 -6.4779
## partyid3_namesNot Sure   -1.8091e-01 7.1834e-02 -2.5184
## partyid3_namesOther     -3.6853e-01 2.6157e-01 -1.4089
## partyid3_namesRepublican -3.8689e-01 4.1040e-02 -9.4271
## ethnocentric1     -8.2273e-02 1.7461e-02 -4.7118
## Persuasion:num_muslim   -2.9221e-03 2.0479e-02 -0.1427
## Persuasion:sex         9.2522e-03 2.0547e-02  0.4503
## Persuasion:birthyr      2.8408e-02 1.9697e-02  1.4423
## Persuasion:immigrant2   -2.9940e-02 4.4739e-02 -0.6692
## Persuasion:educ        2.3793e-02 2.0994e-02  1.1333
## Persuasion:religpew2    4.3246e-02 6.3918e-02  0.6766
## Persuasion:religpew3   -6.3812e-02 2.2141e-01 -0.2882
## Persuasion:religpew4   -1.4619e-01 2.6144e-01 -0.5592
## Persuasion:religpew5   -6.0169e-02 1.2361e-01 -0.4868
## Persuasion:religpew6    1.7895e-01 3.3083e-01  0.5409
## Persuasion:religpew7    1.1941e-01 2.0270e-01  0.5891
## Persuasion:religpew9   -8.0659e-02 7.1972e-02 -1.1207
## Persuasion:religpew10   1.0070e-02 7.5635e-02  0.1331
## Persuasion:religpew11  -5.8395e-02 6.0859e-02 -0.9595
## Persuasion:religpew12  -5.5860e-02 9.4101e-02 -0.5936
## Persuasion:partyid3_namesIndependent 3.9413e-03 4.7875e-02  0.0823
## Persuasion:partyid3_namesNot Sure   -1.0744e-01 1.0005e-01 -1.0739
```

```

## Persuasion:partyid3_namesOther      2.5987e-01  2.8941e-01  0.8979
## Persuasion:partyid3_namesRepublican  6.1449e-02  5.7527e-02  1.0682
## Persuasion:ethnocentric1            -1.6846e-02  2.2551e-02 -0.7470
##                                     Pr(>|t|)
## (Intercept)                         < 2.2e-16 ***
## Persuasion                          0.5427636
## num_muslim                          0.7528844
## sex                                 0.9951620
## birthyr                             0.2444575
## immigrant2                          0.2856854
## educ                                0.0393532 *
## religpew2                           0.3230149
## religpew3                           0.3067630
## religpew4                           0.6299250
## religpew5                           0.3020356
## religpew6                           0.6765902
## religpew7                           0.5045242
## religpew8                           < 2.2e-16 ***
## religpew9                           6.086e-05 ***
## religpew10                          0.0006968 ***
## religpew11                          0.0843477 .
## religpew12                          0.0067051 **
## partyid3_namesIndependent            1.204e-10 ***
## partyid3_namesNot Sure               0.0118762 *
## partyid3_namesOther                  0.1590442
## partyid3_namesRepublican             < 2.2e-16 ***
## ethnocentric1                       2.649e-06 ***
## Persuasion:num_muslim                0.8865541
## Persuasion:sex                       0.6525607
## Persuasion:birthyr                   0.1494048
## Persuasion:immigrant2                0.5034435
## Persuasion:educ                      0.2572300
## Persuasion:religpew2                 0.4987603
## Persuasion:religpew3                 0.7732281
## Persuasion:religpew4                 0.5761247
## Persuasion:religpew5                 0.6264941
## Persuasion:religpew6                 0.5886264
## Persuasion:religpew7                 0.5558611
## Persuasion:religpew9                 0.2625692
## Persuasion:religpew10                0.8940949
## Persuasion:religpew11                0.3374337
## Persuasion:religpew12                0.5528430
## Persuasion:partyid3_namesIndependent 0.9343986
## Persuasion:partyid3_namesNot Sure    0.2830075
## Persuasion:partyid3_namesOther       0.3693427
## Persuasion:partyid3_namesRepublican  0.2855849
## Persuasion:ethnocentric1             0.4551564
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

No statistically significant effect of Persuasion:num\_muslim on Y4.

### H11a: (Heterogeneous empathy and muslim effect: screening over time)

The heterogeneous effect of the empathy treatment and seeing Muslim refugee profiles (compared to a Christian refugee profile) on favoring the U.S. taking in Syrian refugees who pass a government security screening may degrade in magnitude over time but will persist. We use `ControlEmpathy.data.w2`.

```

##
## t test of coefficients:
##
##               Estimate Std. Error  t value  Pr(>|t|)
## (Intercept)      0.8252279  0.0397421  20.7646 < 2.2e-16
## Empathy           0.0111081  0.0568610   0.1954 0.8451369
## num_muslim       -0.0106383  0.0148682  -0.7155 0.4743918
## sex              -0.0182135  0.0145448  -1.2522 0.2106513
## birthyr          0.0089841  0.0152988   0.5872 0.5571147
## immigrant2       -0.0290495  0.0310001  -0.9371 0.3488475
## educ             0.0380065  0.0146687   2.5910 0.0096494
## religpew2        -0.0150498  0.0423508  -0.3554 0.7223622
## religpew3         0.1627465  0.1485626   1.0955 0.2734592
## religpew4        -0.5118834  0.1050051  -4.8748 1.187e-06
## religpew5        -0.0556901  0.0910495  -0.6116 0.5408514
## religpew6         0.2659748  0.0690518   3.8518 0.0001215
## religpew7        -0.0149624  0.1158529  -0.1292 0.8972536
## religpew8         0.7014210  0.1234446   5.6821 1.555e-08
## religpew9         0.1519274  0.0525236   2.8926 0.0038683
## religpew10        0.1210228  0.0622167   1.9452 0.0519126
## religpew11        0.0790861  0.0411418   1.9223 0.0547319
## religpew12        0.0340561  0.0607066   0.5610 0.5748725
## partyid3_namesIndependent -0.3149233  0.0328584  -9.5842 < 2.2e-16
## partyid3_namesNot Sure  -0.3327570  0.0697749  -4.7690 2.004e-06
## partyid3_namesOther    -0.4260184  0.1262018  -3.3757 0.0007523
## partyid3_namesRepublican -0.4226245  0.0392133 -10.7776 < 2.2e-16
## ethnocentric1       -0.1123395  0.0169323  -6.6346 4.320e-11
## Empathy:num_muslim    0.0022953  0.0209563   0.1095 0.9127979
## Empathy:sex          0.0085274  0.0206184   0.4136 0.6792317
## Empathy:birthyr      0.0286743  0.0220855   1.2983 0.1943451
## Empathy:immigrant2   -0.0473161  0.0446456  -1.0598 0.2893742
## Empathy:educ         0.0176072  0.0209606   0.8400 0.4010151
## Empathy:religpew2    -0.0186730  0.0619800  -0.3013 0.7632413
## Empathy:religpew3    -0.0340082  0.2012465  -0.1690 0.8658256
## Empathy:religpew4     0.6009776  0.1868164   3.2169 0.0013192
## Empathy:religpew5     0.0157519  0.1237610   0.1273 0.8987360
## Empathy:religpew6    -0.4889947  0.2511723  -1.9468 0.0517121
## Empathy:religpew7     0.2108570  0.1633937   1.2905 0.1970525
## Empathy:religpew8    -0.4092901  0.1321471  -3.0972 0.0019843
## Empathy:religpew9    -0.0059525  0.0769556  -0.0773 0.9383540
## Empathy:religpew10   0.0123317  0.0788334   0.1564 0.8757145
## Empathy:religpew11   -0.1132580  0.0584783  -1.9368 0.0529360
## Empathy:religpew12   -0.1618119  0.0952742  -1.6984 0.0896132
## Empathy:partyid3_namesIndependent 0.0764970  0.0481057   1.5902 0.1119729
## Empathy:partyid3_namesNot Sure  0.1693794  0.0942113   1.7979 0.0723698
## Empathy:partyid3_namesOther  0.4312037  0.1667804   2.5855 0.0098049
## Empathy:partyid3_namesRepublican 0.1022037  0.0569504   1.7946 0.0728877
## Empathy:ethnocentric1  0.0064799  0.0231555   0.2798 0.7796326
##
## (Intercept)      ***
## Empathy
## num_muslim
## sex
## birthyr
## immigrant2
## educ             **
## religpew2

```

```

## religpew3
## religpew4 ***
## religpew5
## religpew6 ***
## religpew7
## religpew8 ***
## religpew9 **
## religpew10 .
## religpew11 .
## religpew12
## partyid3_namesIndependent ***
## partyid3_namesNot Sure ***
## partyid3_namesOther ***
## partyid3_namesRepublican ***
## ethnocentric1 ***
## Empathy:num_muslim
## Empathy:sex
## Empathy:birthyr
## Empathy:immigrant2
## Empathy:educ
## Empathy:religpew2
## Empathy:religpew3
## Empathy:religpew4 **
## Empathy:religpew5
## Empathy:religpew6 .
## Empathy:religpew7
## Empathy:religpew8 **
## Empathy:religpew9
## Empathy:religpew10
## Empathy:religpew11 .
## Empathy:religpew12 .
## Empathy:partyid3_namesIndependent
## Empathy:partyid3_namesNot Sure .
## Empathy:partyid3_namesOther **
## Empathy:partyid3_namesRepublican .
## Empathy:ethnocentric1
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

No statistically significant effect of Empathy:num\_muslim on Y4.

### H11b: (Heterogeneous persuasion and muslim effect: screening over time)

The heterogeneous effect of the persuasion treatment with and seeing a Muslim refugee profile compared to a Christian refugee profile on the likelihood of favoring the U.S. taking in Syrian refugees who pass a government security screening may degrade in magnitude over time but will persist. We use `ControlPersuasion.data.w2`.

```

##
## t test of coefficients:
##
##               Estimate Std. Error t value Pr(>|t|)
## (Intercept)    0.8110000  0.0198937  40.7666 < 2.2e-16 ***
## num_muslim     -0.0145014  0.0072960  -1.9876  0.046933 *
## sex            -0.0064606  0.0073048  -0.8844  0.376527
## birthyr         0.0313860  0.0075631   4.1499 3.404e-05 ***
## immigrant2     -0.0414186  0.0157479  -2.6301  0.008572 **
## educ           0.0414380  0.0074225   5.5828 2.543e-08 ***

```

```

## religpew2          -0.0149502  0.0219754  -0.6803  0.496350
## religpew3          0.1362904  0.0644475   2.1148  0.034520 *
## religpew4         -0.1322978  0.1010325  -1.3095  0.190464
## religpew5          0.0236374  0.0456607   0.5177  0.604717
## religpew6          0.1024002  0.0825417   1.2406  0.214840
## religpew7          0.0951660  0.0671455   1.4173  0.156479
## religpew8          0.4056304  0.0919459   4.4116  1.056e-05 ***
## religpew9          0.1143229  0.0271360   4.2130  2.583e-05 ***
## religpew10         0.1180470  0.0266757   4.4253  9.920e-06 ***
## religpew11         0.0223841  0.0212983   1.0510  0.293338
## religpew12         0.0164005  0.0333196   0.4922  0.622596
## partyid3_namesIndependent -0.2352929  0.0168685 -13.9486 < 2.2e-16 ***
## partyid3_namesNot Sure  -0.2171440  0.0340344  -6.3801  1.996e-10 ***
## partyid3_namesOther     -0.2160587  0.0815897  -2.6481  0.008130 **
## partyid3_namesRepublican -0.3810549  0.0200907 -18.9667 < 2.2e-16 ***
## ethnocentric1         -0.1027884  0.0082938 -12.3934 < 2.2e-16 ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

No statistically significant effect of Persuasion:num\_muslim on Y4.

As indicated in our preanalysis plan, as a robustness check for our primary outcome Y2, we check whether the empathy and persuasion treatments have similar positive effects on outcome Y4 that should reasonably have some correlations with Y2. We also look at whether there is an overall reduction in discrimination on any basis in refugee pair profiles (reported differences in scores assigned to Y2 and Y3).

## H12a: (Empathy effect on screening)

The empathy prime will significantly increase the respondent's reported inclusionary attitude for the U.S. taking in Syrian refugees who pass a government security screening. We use `ControlEmpathy.data.w1`.

```

##
## t test of coefficients:
##
##              Estimate Std. Error t value
## (Intercept)    7.3704e-01  4.2266e-02 17.4380
## Empathy        1.0352e-01  5.5830e-02  1.8542
## sex           -4.4623e-05  1.4669e-02 -0.0030
## birthyr        1.6753e-02  1.4436e-02  1.1605
## immigrant2     -3.4357e-02  3.2284e-02 -1.0642
## educ           3.1216e-02  1.5087e-02  2.0690
## religpew2      4.6120e-02  4.5847e-02  1.0060
## religpew3      1.1406e-01  1.1189e-01  1.0194
## religpew4      9.3212e-02  1.9426e-01  0.4798
## religpew5      8.5221e-02  8.3557e-02  1.0199
## religpew6     -1.2002e-01  2.9093e-01 -0.4125
## religpew7      1.2637e-01  1.8433e-01  0.6856
## religpew8      6.5882e-01  4.8464e-02 13.5939
## religpew9      2.2024e-01  5.3672e-02  4.1034
## religpew10     1.7788e-01  5.2076e-02  3.4158
## religpew11     7.6443e-02  4.3878e-02  1.7422
## religpew12     1.8056e-01  6.6181e-02  2.7282
## partyid3_namesIndependent -2.2101e-01  3.4054e-02 -6.4901
## partyid3_namesNot Sure  -1.8051e-01  7.1779e-02 -2.5147
## partyid3_namesOther    -3.6269e-01  2.6209e-01 -1.3838
## partyid3_namesRepublican -3.8660e-01  4.1039e-02 -9.4201
## ethnocentric1    -8.2299e-02  1.7462e-02 -4.7132
## Empathy:sex      1.7088e-03  2.0677e-02  0.0826

```

## Empathy:birthyr	4.4281e-02	2.0687e-02	2.1405
## Empathy:immigrant2	6.2549e-03	4.4558e-02	0.1404
## Empathy:educ	1.3002e-02	2.0887e-02	0.6225
## Empathy:religpew2	-1.0391e-01	6.2521e-02	-1.6621
## Empathy:religpew3	2.9735e-02	1.5629e-01	0.1903
## Empathy:religpew4	-5.5159e-01	2.3847e-01	-2.3130
## Empathy:religpew5	-2.5239e-03	1.2791e-01	-0.0197
## Empathy:religpew6	2.8257e-01	3.0997e-01	0.9116
## Empathy:religpew7	-4.7509e-02	2.0308e-01	-0.2339
## Empathy:religpew8	-5.5293e-01	9.8818e-02	-5.5954
## Empathy:religpew9	-2.5398e-01	7.6457e-02	-3.3218
## Empathy:religpew10	-1.3222e-01	7.6897e-02	-1.7194
## Empathy:religpew11	-8.8128e-02	6.0636e-02	-1.4534
## Empathy:religpew12	-1.8754e-01	9.0167e-02	-2.0799
## Empathy:partyid3_namesIndependent	3.9770e-02	4.7148e-02	0.8435
## Empathy:partyid3_namesNot Sure	-3.0678e-05	9.7881e-02	-0.0003
## Empathy:partyid3_namesOther	3.2454e-02	3.2983e-01	0.0984
## Empathy:partyid3_namesRepublican	-1.5326e-02	5.7189e-02	-0.2680
## Empathy:ethnocentric1	-2.1141e-02	2.3520e-02	-0.8989
##	Pr(> t )		
## (Intercept)	< 2.2e-16 ***		
## Empathy	0.0638717 .		
## sex	0.9975731		
## birthyr	0.2460093		
## immigrant2	0.2873777		
## educ	0.0386900 *		
## religpew2	0.3145765		
## religpew3	0.3081507		
## religpew4	0.6314081		
## religpew5	0.3079117		
## religpew6	0.6800075		
## religpew7	0.4930571		
## religpew8	< 2.2e-16 ***		
## religpew9	4.258e-05 ***		
## religpew10	0.0006505 ***		
## religpew11	0.0816533 .		
## religpew12	0.0064309 **		
## partyid3_namesIndependent	1.112e-10 ***		
## partyid3_namesNot Sure	0.0120005 *		
## partyid3_namesOther	0.1665883		
## partyid3_namesRepublican	< 2.2e-16 ***		
## ethnocentric1	2.631e-06 ***		
## Empathy:sex	0.9341436		
## Empathy:birthyr	0.0324548 *		
## Empathy:immigrant2	0.8883770		
## Empathy:educ	0.5336768		
## Empathy:religpew2	0.0966750 .		
## Empathy:religpew3	0.8491299		
## Empathy:religpew4	0.0208370 *		
## Empathy:religpew5	0.9842596		
## Empathy:religpew6	0.3620962		
## Empathy:religpew7	0.8150545		
## Empathy:religpew8	2.548e-08 ***		
## Empathy:religpew9	0.0009126 ***		
## Empathy:religpew10	0.0857165 .		
## Empathy:religpew11	0.1462908		
## Empathy:religpew12	0.0376756 *		



```
## Empathy:partyid3_namesIndependent 0.3990565
## Empathy:partyid3_namesNot Sure 0.9997500
## Empathy:partyid3_namesOther 0.9216303
## Empathy:partyid3_namesRepublican 0.7887344
## Empathy:ethnocentric1 0.3688509
## ---
## Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

There is a small positive, empathy effect (coefficient=0.010352) on likelihood of being in favor of taking in Syrian refugees who pass screening, though this is at a pvalue of 0.0638717.

## H12b: (Persuasion effect on screening)

The persuasion treatment will significantly increase the respondent's reported inclusionary attitude for the U.S. taking in Syrian refugees who pass a government security screening. We use `ControlPersuasion.data.w1`.

```
##
## t test of coefficients:
##
##               Estimate Std. Error t value
## (Intercept)      7.3704e-01 4.2266e-02 17.4380
## Persuasion        3.5495e-02 5.6822e-02  0.6247
## sex              -4.4623e-05 1.4669e-02 -0.0030
## birthyr          1.6753e-02 1.4436e-02  1.1605
## immigrant2       -3.4357e-02 3.2284e-02 -1.0642
## educ             3.1216e-02 1.5087e-02  2.0690
## religpew2        4.6120e-02 4.5847e-02  1.0060
## religpew3        1.1406e-01 1.1189e-01  1.0194
## religpew4        9.3212e-02 1.9426e-01  0.4798
## religpew5        8.5221e-02 8.3557e-02  1.0199
## religpew6       -1.2002e-01 2.9093e-01 -0.4125
## religpew7        1.2637e-01 1.8433e-01  0.6856
## religpew8        6.5882e-01 4.8464e-02 13.5939
## religpew9        2.2024e-01 5.3672e-02  4.1034
## religpew10       1.7788e-01 5.2076e-02  3.4158
## religpew11       7.6443e-02 4.3878e-02  1.7422
## religpew12       1.8056e-01 6.6181e-02  2.7282
## partyid3_namesIndependent -2.2101e-01 3.4054e-02 -6.4901
## partyid3_namesNot Sure -1.8051e-01 7.1779e-02 -2.5147
## partyid3_namesOther -3.6269e-01 2.6209e-01 -1.3838
## partyid3_namesRepublican -3.8660e-01 4.1039e-02 -9.4201
## ethnocentric1    -8.2299e-02 1.7462e-02 -4.7132
## Persuasion:sex     9.6744e-03 2.0520e-02  0.4715
## Persuasion:birthyr  2.8600e-02 1.9689e-02  1.4525
## Persuasion:immigrant2 -3.1271e-02 4.4725e-02 -0.6992
## Persuasion:educ     2.3886e-02 2.0994e-02  1.1378
## Persuasion:religpew2  4.2803e-02 6.3822e-02  0.6707
## Persuasion:religpew3 -6.2454e-02 2.2130e-01 -0.2822
## Persuasion:religpew4 -1.4845e-01 2.6155e-01 -0.5676
## Persuasion:religpew5 -6.0939e-02 1.2320e-01 -0.4946
## Persuasion:religpew6  1.7806e-01 3.3055e-01  0.5387
## Persuasion:religpew7  1.1735e-01 2.0180e-01  0.5815
## Persuasion:religpew9 -8.2595e-02 7.1526e-02 -1.1548
## Persuasion:religpew10 9.5978e-03 7.5566e-02  0.1270
## Persuasion:religpew11 -5.9147e-02 6.0903e-02 -0.9712
## Persuasion:religpew12 -5.4475e-02 9.4000e-02 -0.5795
## Persuasion:partyid3_namesIndependent 5.4844e-03 4.7857e-02  0.1146
```

```

## Persuasion:partyid3_namesNot Sure -1.0818e-01 1.0004e-01 -1.0814
## Persuasion:partyid3_namesOther 2.5207e-01 2.8964e-01 0.8703
## Persuasion:partyid3_namesRepublican 6.1666e-02 5.7535e-02 1.0718
## Persuasion:ethnocentric1 -1.6875e-02 2.2559e-02 -0.7480
## Pr(>|t|)
## (Intercept) < 2.2e-16 ***
## Persuasion 0.5322767
## sex 0.9975731
## birthyr 0.2460092
## immigrant2 0.2873776
## educ 0.0386899 *
## religpew2 0.3145764
## religpew3 0.3081506
## religpew4 0.6314081
## religpew5 0.3079116
## religpew6 0.6800074
## religpew7 0.4930570
## religpew8 < 2.2e-16 ***
## religpew9 4.258e-05 ***
## religpew10 0.0006505 ***
## religpew11 0.0816532 .
## religpew12 0.0064308 **
## partyid3_namesIndependent 1.112e-10 ***
## partyid3_namesNot Sure 0.0120004 *
## partyid3_namesOther 0.1665882
## partyid3_namesRepublican < 2.2e-16 ***
## ethnocentric1 2.631e-06 ***
## Persuasion:sex 0.6373703
## Persuasion:birthyr 0.1465320
## Persuasion:immigrant2 0.4845307
## Persuasion:educ 0.2553755
## Persuasion:religpew2 0.5025221
## Persuasion:religpew3 0.7778129
## Persuasion:religpew4 0.5704061
## Persuasion:religpew5 0.6209349
## Persuasion:religpew6 0.5901839
## Persuasion:religpew7 0.5609675
## Persuasion:religpew9 0.2483450
## Persuasion:religpew10 0.8989463
## Persuasion:religpew11 0.3315985
## Persuasion:religpew12 0.5623113
## Persuasion:partyid3_namesIndependent 0.9087755
## Persuasion:partyid3_namesNot Sure 0.2796714
## Persuasion:partyid3_namesOther 0.3842521
## Persuasion:partyid3_namesRepublican 0.2839555
## Persuasion:ethnocentric1 0.4545528
## ---
## Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

There is no statistically significant effect of persuasion on screening (Y4).

### H13a: (Empathy effect on difference in scores of refugee pair)

The empathy prime will significantly decrease the magnitude of the average difference in admission scores across refugee pairs (i.e. reduce discrimination on any basis). We use `ControlEmpathy.data.y2y3` and create a variable `diffy2y3` that is the absolute difference between the respondent's reported score for Y2 and for Y3 in wave 1.

```

##
## t test of coefficients:
##
##               Estimate Std. Error t value Pr(>|t|)
## (Intercept)      0.969803   0.123070   7.8801 3.933e-15
## Empathy           0.011538   0.169747   0.0680 0.945812
## sex               0.057816   0.041947   1.3783 0.168166
## birthyr          -0.065487   0.040927  -1.6001 0.109642
## immigrant2        -0.135570   0.092613  -1.4638 0.143298
## educ              -0.042402   0.044135  -0.9607 0.336738
## religpew2         0.066416   0.132296   0.5020 0.615668
## religpew3        -0.267260   0.293874  -0.9094 0.363161
## religpew4        -0.226296   0.383182  -0.5906 0.554833
## religpew5        -0.117254   0.247342  -0.4741 0.635480
## religpew6         2.093243   1.196960   1.7488 0.080383
## religpew7         0.494291   0.494172   1.0002 0.317239
## religpew8         0.953887   0.141350   6.7484 1.653e-11
## religpew9         0.029525   0.174752   0.1690 0.865839
## religpew10        -0.162000   0.144201  -1.1234 0.261305
## religpew11        -0.108469   0.114882  -0.9442 0.345124
## religpew12        -0.153895   0.227609  -0.6761 0.498982
## partyid3_namesIndependent -0.031123   0.096595  -0.3222 0.747311
## partyid3_namesNot Sure   0.045267   0.201036   0.2252 0.821856
## partyid3_namesOther     -0.282205   0.245124  -1.1513 0.249671
## partyid3_namesRepublican  0.217951   0.124826   1.7460 0.080861
## ethnocentric1         0.145367   0.051551   2.8199 0.004822
## Empathy:sex          -0.050714   0.060214  -0.8422 0.399697
## Empathy:birthyr      -0.026071   0.059397  -0.4389 0.660728
## Empathy:immigrant2     0.102104   0.128807   0.7927 0.427992
## Empathy:educ          0.037685   0.062996   0.5982 0.549730
## Empathy:religpew2     -0.200202   0.181720  -1.1017 0.270639
## Empathy:religpew3     -0.190150   0.431628  -0.4405 0.659562
## Empathy:religpew4     -0.472826   0.474079  -0.9974 0.318636
## Empathy:religpew5      0.082002   0.389667   0.2104 0.833331
## Empathy:religpew6     -2.874176   1.221231  -2.3535 0.018633
## Empathy:religpew7     -0.674862   0.556830  -1.2120 0.225577
## Empathy:religpew8     -0.786138   0.196430  -4.0021 6.362e-05
## Empathy:religpew9     -0.202923   0.234932  -0.8638 0.387763
## Empathy:religpew10    -0.029717   0.202620  -0.1467 0.883401
## Empathy:religpew11    -0.023333   0.176685  -0.1321 0.894941
## Empathy:religpew12     0.036429   0.294265   0.1238 0.901481
## Empathy:partyid3_namesIndependent 0.149871   0.138390   1.0830 0.278872
## Empathy:partyid3_namesNot Sure -0.269880   0.248977  -1.0840 0.278432
## Empathy:partyid3_namesOther  -0.451603   0.458792  -0.9843 0.324998
## Empathy:partyid3_namesRepublican  0.055996   0.179768   0.3115 0.755440
## Empathy:ethnocentric1  0.047081   0.068298   0.6893 0.490635
##
## (Intercept)      ***
## Empathy
## sex
## birthyr
## immigrant2
## educ
## religpew2
## religpew3
## religpew4
## religpew5

```

```

## religpew6 .
## religpew7
## religpew8 ***
## religpew9
## religpew10
## religpew11
## religpew12
## partyid3_namesIndependent
## partyid3_namesNot Sure
## partyid3_namesOther
## partyid3_namesRepublican .
## ethnocentric1 **
## Empathy:sex
## Empathy:birthyr
## Empathy:immigrant2
## Empathy:educ
## Empathy:religpew2
## Empathy:religpew3
## Empathy:religpew4
## Empathy:religpew5
## Empathy:religpew6 *
## Empathy:religpew7
## Empathy:religpew8 ***
## Empathy:religpew9
## Empathy:religpew10
## Empathy:religpew11
## Empathy:religpew12
## Empathy:partyid3_namesIndependent
## Empathy:partyid3_namesNot Sure
## Empathy:partyid3_namesOther
## Empathy:partyid3_namesRepublican
## Empathy:ethnocentric1
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

No statistically significant effect on Empathy (vs Persuasion). ### H13b: (Persuasion effect on difference in scores of refugee pair) The persuasion treatment will significantly decrease the magnitude of the average difference in admission scores across refugee pairs (i.e. reduce discrimination on any basis). We use `ControlPersuasion.data.y2y3` and create a variable `diffy2y3` that is the absolute difference between the respondent's reported score for Y2 and for Y3 in wave 1.

```

##
## t test of coefficients:
##
##               Estimate Std. Error t value
## (Intercept)    0.96980255  0.12305263  7.8812
## Persuasion    -0.04144996  0.16838113 -0.2462
## sex           0.05781647  0.04194160  1.3785
## birthyr      -0.06548681  0.04092169 -1.6003
## immigrant2    -0.13557043  0.09260031 -1.4640
## educ         -0.04240171  0.04412927 -0.9609
## religpew2     0.06641618  0.13227696  0.5021
## religpew3    -0.26726007  0.29383320 -0.9096
## religpew4    -0.22629613  0.38312855 -0.5907
## religpew5    -0.11725379  0.24730772 -0.4741
## religpew6     2.09324322  1.19679235  1.7490
## religpew7     0.49429092  0.49410285  1.0004
## religpew8     0.95388657  0.14133026  6.7493

```

## religpew9	0.02952500	0.17472707	0.1690
## religpew10	-0.16200021	0.14418104	-1.1236
## religpew11	-0.10846869	0.11486616	-0.9443
## religpew12	-0.15389526	0.22757713	-0.6762
## partyid3_namesIndependent	-0.03112314	0.09658094	-0.3222
## partyid3_namesNot Sure	0.04526732	0.20100824	0.2252
## partyid3_namesOther	-0.28220471	0.24508939	-1.1514
## partyid3_namesRepublican	0.21795090	0.12480803	1.7463
## ethnocentric1	0.14536734	0.05154383	2.8203
## Persuasion:sex	0.00372856	0.06147893	0.0606
## Persuasion:birthyr	-0.02227930	0.06073979	-0.3668
## Persuasion:immigrant2	0.15592697	0.13099153	1.1904
## Persuasion:educ	0.05278548	0.06387219	0.8264
## Persuasion:religpew2	-0.02952229	0.19090804	-0.1546
## Persuasion:religpew3	-0.00971034	0.49870889	-0.0195
## Persuasion:religpew4	0.09089034	0.50527027	0.1799
## Persuasion:religpew5	0.05390525	0.37437394	0.1440
## Persuasion:religpew6	-2.25660377	1.22845724	-1.8369
## Persuasion:religpew7	-0.33006397	0.60073900	-0.5494
## Persuasion:religpew9	-0.16424447	0.24050538	-0.6829
## Persuasion:religpew10	0.19551693	0.23196245	0.8429
## Persuasion:religpew11	-0.05987075	0.16547673	-0.3618
## Persuasion:religpew12	0.24096881	0.32310737	0.7458
## Persuasion:partyid3_namesIndependent	0.06311103	0.14231065	0.4435
## Persuasion:partyid3_namesNot Sure	-0.05624775	0.28038034	-0.2006
## Persuasion:partyid3_namesOther	-0.01205450	0.36550367	-0.0330
## Persuasion:partyid3_namesRepublican	-0.04209560	0.17806226	-0.2364
## Persuasion:ethnocentric1	0.00033248	0.07446378	0.0045
##	Pr(> t )		
## (Intercept)	3.899e-15	***	
## Persuasion	0.805562		
## sex	0.168107		
## birthyr	0.109592		
## immigrant2	0.143242		
## educ	0.336670		
## religpew2	0.615618		
## religpew3	0.363093		
## religpew4	0.554778		
## religpew5	0.635433		
## religpew6	0.080341	.	
## religpew7	0.317172		
## religpew8	1.642e-11	***	
## religpew9	0.865820		
## religpew10	0.261238		
## religpew11	0.345056		
## religpew12	0.498922		
## partyid3_namesIndependent	0.747276		
## partyid3_namesNot Sure	0.821831		
## partyid3_namesOther	0.249604		
## partyid3_namesRepublican	0.080818	.	
## ethnocentric1	0.004816	**	
## Persuasion:sex	0.951642		
## Persuasion:birthyr	0.713783		
## Persuasion:immigrant2	0.233958		
## Persuasion:educ	0.408601		
## Persuasion:religpew2	0.877110		
## Persuasion:religpew3	0.984466		

```

## Persuasion:religpew4          0.857250
## Persuasion:religpew5          0.885516
## Persuasion:religpew6          0.066274 .
## Persuasion:religpew7          0.582733
## Persuasion:religpew9          0.494691
## Persuasion:religpew10         0.399332
## Persuasion:religpew11         0.717510
## Persuasion:religpew12         0.455830
## Persuasion:partyid3_namesIndependent 0.657441
## Persuasion:partyid3_namesNot Sure 0.841009
## Persuasion:partyid3_namesOther 0.973691
## Persuasion:partyid3_namesRepublican 0.813124
## Persuasion:ethnocentric1      0.996438
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

No statistically significant effect of Persuasion on difference in scores.

#### H14a: (Difference between Empathy and Persuasion for refugee scores)

Respondents who receive the empathy prime will have significantly different point scores reported for refugee profiles than those in the persuasion group. We use `EmpathyPersuasion.data.y2.w1`.

```

##
## t test of coefficients:
##
##               Estimate Std. Error t value Pr(>|t|)
## (Intercept)      5.1978182  0.1512197 34.3726 < 2.2e-16
## Empathy           0.0749811  0.2121794  0.3534  0.723807
## sex              0.0028263  0.0566810  0.0499  0.960233
## birthyr          0.2326338  0.0513004  4.5347 5.830e-06
## immigrant2       -0.1533665  0.1218264 -1.2589 0.208096
## educ             0.1382720  0.0565782  2.4439 0.014545
## religpew2        0.1093724  0.1655833  0.6605 0.508929
## religpew3        0.4521147  0.4911222  0.9206 0.357293
## religpew4        0.6643565  0.5358058  1.2399 0.215032
## religpew5       -0.0190262  0.3593248 -0.0529 0.957773
## religpew6        0.8276438  0.5966640  1.3871 0.165434
## religpew7        0.8831621  0.3472618  2.5432 0.010998
## religpew8        0.7943913  0.4215587  1.8844 0.059536
## religpew9        0.5742257  0.2130582  2.6952 0.007046
## religpew10       0.3478244  0.2305116  1.5089 0.131348
## religpew11      -0.0888500  0.1678446 -0.5294 0.596568
## religpew12       0.0454757  0.2936054  0.1549 0.876913
## partyid3_namesIndependent -0.8908601  0.1359714 -6.5518 5.944e-11
## partyid3_namesNot Sure  -0.8537801  0.2734901 -3.1218 0.001802
## partyid3_namesOther    -1.0937672  0.4474200 -2.4446 0.014517
## partyid3_namesRepublican -1.4157299  0.1537405 -9.2086 < 2.2e-16
## ethnocentric1     -0.3257858  0.0722741 -4.5076 6.625e-06
## Empathy:sex        0.0045115  0.0799107  0.0565 0.954978
## Empathy:birthyr   -0.0156257  0.0761263 -0.2053 0.837373
## Empathy:immigrant2 -0.0181968  0.1724651 -0.1055 0.915973
## Empathy:educ       0.0466138  0.0798556  0.5837 0.559417
## Empathy:religpew2  -0.0404120  0.2304138 -0.1754 0.860778
## Empathy:religpew3  -0.2680774  0.7092649 -0.3780 0.705464
## Empathy:religpew4  -1.7898893  0.9766685 -1.8326 0.066883
## Empathy:religpew5  -0.1050732  0.5120642 -0.2052 0.837423

```

```

## Empathy:religpew6          -0.4981136  0.9430057 -0.5282  0.597358
## Empathy:religpew7          0.1280880  0.4130653  0.3101  0.756498
## Empathy:religpew9          -0.6346245  0.3203753 -1.9809  0.047630
## Empathy:religpew10         -0.2470756  0.3212330 -0.7691  0.441823
## Empathy:religpew11         -0.0742730  0.2353647 -0.3156  0.752338
## Empathy:religpew12         -0.1634296  0.3747902 -0.4361  0.662805
## Empathy:partyid3_namesIndependent 0.3713669  0.1860021  1.9966  0.045897
## Empathy:partyid3_namesNot Sure  0.1078550  0.3763907  0.2866  0.774462
## Empathy:partyid3_namesOther    -0.2853502  1.6937360 -0.1685  0.866214
## Empathy:partyid3_namesRepublican 0.1729142  0.2198201  0.7866  0.431524
## Empathy:ethnocentric1        -0.0439333  0.0991628 -0.4430  0.657744
##
## (Intercept)                ***
## Empathy
## sex
## birthyr                    ***
## immigrant2
## educ                        *
## religpew2
## religpew3
## religpew4
## religpew5
## religpew6
## religpew7                  *
## religpew8                  .
## religpew9                  **
## religpew10
## religpew11
## religpew12
## partyid3_namesIndependent    ***
## partyid3_namesNot Sure      **
## partyid3_namesOther         *
## partyid3_namesRepublican    ***
## ethnocentric1               ***
## Empathy:sex
## Empathy:birthyr
## Empathy:immigrant2
## Empathy:educ
## Empathy:religpew2
## Empathy:religpew3
## Empathy:religpew4          .
## Empathy:religpew5
## Empathy:religpew6
## Empathy:religpew7
## Empathy:religpew9          *
## Empathy:religpew10
## Empathy:religpew11
## Empathy:religpew12
## Empathy:partyid3_namesIndependent *
## Empathy:partyid3_namesNot Sure
## Empathy:partyid3_namesOther
## Empathy:partyid3_namesRepublican
## Empathy:ethnocentric1
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

No statistically significant effect of Empathy (vs Persuasion) on difference in refugee scores.

#### H14b: (Difference between Empathy and Persuasion for accepting refugees who pass security screening)

Respondents who receive the empathy prime will have a significantly different preference for the U.S. taking in Syrian refugees who pass a government security screening than respondents in the persuasion group. We use EmpathyPersuasion.data.w1.

```
##
## t test of coefficients:
##
##
```

	Estimate	Std. Error	t value	Pr(> t )
## (Intercept)	0.7725304	0.0379785	20.3412	< 2.2e-16
## Empathy	0.0680278	0.0526587	1.2919	0.1965748
## sex	0.0096298	0.0143495	0.6711	0.5022510
## birthyr	0.0453522	0.0133894	3.3872	0.0007218
## immigrant2	-0.0656278	0.0309526	-2.1203	0.0341229
## educ	0.0551024	0.0145987	3.7745	0.0001657
## religpew2	0.0889232	0.0443996	2.0028	0.0453525
## religpew3	0.0516103	0.1909274	0.2703	0.7869504
## religpew4	-0.0552348	0.1751358	-0.3154	0.7525086
## religpew5	0.0242821	0.0905404	0.2682	0.7885840
## religpew6	0.0580418	0.1569165	0.3699	0.7115093
## religpew7	0.2437238	0.0821409	2.9671	0.0030464
## religpew8	0.1058881	0.0861179	1.2296	0.2190217
## religpew9	0.1376414	0.0472779	2.9113	0.0036443
## religpew10	0.1874774	0.0547576	3.4238	0.0006318
## religpew11	0.0172964	0.0422359	0.4095	0.6822085
## religpew12	0.1260808	0.0667542	1.8887	0.0590920
## partyid3_namesIndependent	-0.2155280	0.0336249	-6.4098	1.867e-10
## partyid3_namesNot Sure	-0.2886855	0.0696803	-4.1430	3.591e-05
## partyid3_namesOther	-0.1106117	0.1232863	-0.8972	0.3697386
## partyid3_namesRepublican	-0.3249314	0.0403239	-8.0580	1.417e-15
## ethnocentric1	-0.0991740	0.0142834	-6.9433	5.369e-12
## Empathy:sex	-0.0079656	0.0204516	-0.3895	0.6969633
## Empathy:birthyr	0.0156811	0.0199712	0.7852	0.4324527
## Empathy:immigrant2	0.0375257	0.0436026	0.8606	0.3895586
## Empathy:educ	-0.0108838	0.0205363	-0.5300	0.5961927
## Empathy:religpew2	-0.1467180	0.0614674	-2.3869	0.0170950
## Empathy:religpew3	0.0921890	0.2199095	0.4192	0.6751114
## Empathy:religpew4	-0.4031393	0.2231676	-1.8064	0.0710201
## Empathy:religpew5	0.0584146	0.1325804	0.4406	0.6595585
## Empathy:religpew6	0.1045160	0.1899028	0.5504	0.5821386
## Empathy:religpew7	-0.1648593	0.1183714	-1.3927	0.1638777
## Empathy:religpew9	-0.1713812	0.0721118	-2.3766	0.0175794
## Empathy:religpew10	-0.1418146	0.0787376	-1.8011	0.0718578
## Empathy:religpew11	-0.0289814	0.0594583	-0.4874	0.6260188
## Empathy:religpew12	-0.1330674	0.0905891	-1.4689	0.1420355
## Empathy:partyid3_namesIndependent	0.0342854	0.0468391	0.7320	0.4642762
## Empathy:partyid3_namesNot Sure	0.1081493	0.0963528	1.1224	0.2618327
## Empathy:partyid3_namesOther	-0.2196204	0.2351569	-0.9339	0.3504675
## Empathy:partyid3_namesRepublican	-0.0769922	0.0566772	-1.3584	0.1745006
## Empathy:ethnocentric1	-0.0042666	0.0212674	-0.2006	0.8410200

```
##
## (Intercept) ***
## Empathy
## sex
## birthyr ***
```



```

## immigrant2          *
## educ                ***
## religpew2          *
## religpew3
## religpew4
## religpew5
## religpew6
## religpew7          **
## religpew8
## religpew9          **
## religpew10         ***
## religpew11
## religpew12          .
## partyid3_namesIndependent ***
## partyid3_namesNot Sure ***
## partyid3_namesOther
## partyid3_namesRepublican ***
## ethnocentric1      ***
## Empathy:sex
## Empathy:birthyr
## Empathy:immigrant2
## Empathy:educ
## Empathy:religpew2   *
## Empathy:religpew3
## Empathy:religpew4   .
## Empathy:religpew5
## Empathy:religpew6
## Empathy:religpew7
## Empathy:religpew9   *
## Empathy:religpew10  .
## Empathy:religpew11
## Empathy:religpew12
## Empathy:partyid3_namesIndependent
## Empathy:partyid3_namesNot Sure
## Empathy:partyid3_namesOther
## Empathy:partyid3_namesRepublican
## Empathy:ethnocentric1
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

No statistically significant difference between Empathy/Persuasion effects on screening (Y4).

#### H14c: (Difference between Empathy and Persuasion for writing a letter)

The empathy prime group will have a significantly different preference compared to the persuasion group toward sending an anonymous letter to the White House. We use `EmpathyPersuasion.data.w1`.

```

##
## t test of coefficients:
##
##               Estimate Std. Error t value Pr(>|t|)
## (Intercept)    0.2180303  0.0334371   6.5206 9.124e-11
## Empathy        0.1298184  0.0492897   2.6338 0.0085180
## sex            0.0036206  0.0123260   0.2937 0.7689925
## birthyr        0.0164484  0.0122863   1.3388 0.1808218
## immigrant2     0.0284933  0.0264420   1.0776 0.2813714
## educ           0.0481862  0.0130411   3.6950 0.0002267

```

## religpew2	-0.0017504	0.0341612	-0.0512	0.9591400
## religpew3	0.0594455	0.1461740	0.4067	0.6842950
## religpew4	-0.0545651	0.1264515	-0.4315	0.6661506
## religpew5	-0.0054848	0.0722591	-0.0759	0.9395036
## religpew6	-0.0700345	0.0820886	-0.8532	0.3936883
## religpew7	0.1850833	0.1229518	1.5053	0.1324183
## religpew8	0.1578168	0.2979701	0.5296	0.5964286
## religpew9	0.0671086	0.0576688	1.1637	0.2447074
## religpew10	0.0248463	0.0621741	0.3996	0.6894820
## religpew11	-0.0331804	0.0317206	-1.0460	0.2956959
## religpew12	0.0910374	0.0643204	1.4154	0.1571361
## partyid3_namesIndependent	-0.0989999	0.0302555	-3.2721	0.0010881
## partyid3_namesNot Sure	-0.1370063	0.0447645	-3.0606	0.0022423
## partyid3_namesOther	-0.0956730	0.1108231	-0.8633	0.3880933
## partyid3_namesRepublican	-0.1587425	0.0277728	-5.7158	1.280e-08
## ethnocentric1	-0.0598812	0.0117350	-5.1028	3.709e-07
## Empathy:sex	-0.0130051	0.0178906	-0.7269	0.4673693
## Empathy:birthyr	-0.0112035	0.0185165	-0.6051	0.5452213
## Empathy:immigrant2	-0.0873307	0.0383371	-2.2780	0.0228480
## Empathy:educ	-0.0239320	0.0189795	-1.2609	0.2074993
## Empathy:religpew2	-0.0201143	0.0484777	-0.4149	0.6782520
## Empathy:religpew3	0.0635056	0.1974322	0.3217	0.7477502
## Empathy:religpew4	-0.0983828	0.1345684	-0.7311	0.4648160
## Empathy:religpew5	0.1104959	0.1185429	0.9321	0.3514038
## Empathy:religpew6	0.0384144	0.1562918	0.2458	0.8058761
## Empathy:religpew7	0.0779869	0.1970326	0.3958	0.6922954
## Empathy:religpew9	0.1046033	0.0877085	1.1926	0.2331774
## Empathy:religpew10	0.0183157	0.0901536	0.2032	0.8390328
## Empathy:religpew11	-0.0019174	0.0474333	-0.0404	0.9677612
## Empathy:religpew12	-0.0050059	0.0873018	-0.0573	0.9542804
## Empathy:partyid3_namesIndependent	-0.0349074	0.0448236	-0.7788	0.4362181
## Empathy:partyid3_namesNot Sure	-0.0819023	0.0670016	-1.2224	0.2217225
## Empathy:partyid3_namesOther	0.2094933	0.3173605	0.6601	0.5092688
## Empathy:partyid3_namesRepublican	-0.0451668	0.0421930	-1.0705	0.2845494
## Empathy:ethnocentric1	-0.0275465	0.0179880	-1.5314	0.1258554
##				
## (Intercept)	***			
## Empathy	**			
## sex				
## birthyr				
## immigrant2				
## educ	***			
## religpew2				
## religpew3				
## religpew4				
## religpew5				
## religpew6				
## religpew7				
## religpew8				
## religpew9				
## religpew10				
## religpew11				
## religpew12				
## partyid3_namesIndependent	**			
## partyid3_namesNot Sure	**			
## partyid3_namesOther				
## partyid3_namesRepublican	***			

```

## ethnocentric1          ***
## Empathy:sex
## Empathy:birthyr
## Empathy:immigrant2    *
## Empathy:educ
## Empathy:religpew2
## Empathy:religpew3
## Empathy:religpew4
## Empathy:religpew5
## Empathy:religpew6
## Empathy:religpew7
## Empathy:religpew9
## Empathy:religpew10
## Empathy:religpew11
## Empathy:religpew12
## Empathy:partyid3_namesIndependent
## Empathy:partyid3_namesNot Sure
## Empathy:partyid3_namesOther
## Empathy:partyid3_namesRepublican
## Empathy:ethnocentric1
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

There is a statistically significant effect of Empathy (vs persuasion) on Y6: estimate is 0.1298184, pvalue=0.0085180 (passes Bonferonni correction:  $0.05/6=0.008333333$ ).

#### H15a: (Difference between Empathy and Persuasion in long term on assigning refugee scores)

The effects of the empathy treatment on assigning higher point scores to refugee profiles will degrade significantly differently than the persuasion treatment over time. We use the `EmpathyPersuasion.data.y2.w2` dataset, restricted to only individuals who answered the dependent variable questions in Wave 2.

```

##
## t test of coefficients:
##
##
##          Estimate Std. Error t value  Pr(>|t|)
## (Intercept)      5.2306706   0.1472293 35.5274 < 2.2e-16
## Empathy          -0.1543052   0.2172103 -0.7104 0.4774744
## sex              -0.1418871   0.0590651 -2.4022 0.0163129
## birthyr           0.2973625   0.0585307  5.0805 3.828e-07
## immigrant2       -0.3325796   0.1211222 -2.7458 0.0060461
## educ              0.1060298   0.0562547  1.8848 0.0594814
## religpew2         0.0381178   0.1629279  0.2340 0.8150244
## religpew3         0.2217698   0.2664979  0.8322 0.4053351
## religpew4         1.0274147   0.6808083  1.5091 0.1313000
## religpew5        -0.0113796   0.3753145 -0.0303 0.9758122
## religpew6         1.5600150   0.3482582  4.4795 7.560e-06
## religpew7         0.3550001   0.5161204  0.6878 0.4915784
## religpew8         1.3582704   0.2429430  5.5909 2.314e-08
## religpew9         0.2791162   0.2710415  1.0298 0.3031311
## religpew10        0.2013443   0.2272677  0.8859 0.3756728
## religpew11       -0.0758187   0.1742488 -0.4351 0.6634861
## religpew12       -0.2080438   0.2748324 -0.7570 0.4490759
## partyid3_namesIndependent -0.7544425   0.1418553 -5.3184 1.068e-07
## partyid3_namesNot Sure   -0.9667096   0.2699716 -3.5808 0.0003441
## partyid3_namesOther     -0.8597557   0.4497981 -1.9114 0.0559764
## partyid3_namesRepublican -1.2515347   0.1461074 -8.5659 < 2.2e-16

```

```

## ethnocentric1 -0.4075428 0.0637848 -6.3893 1.735e-10
## Empathy:sex 0.1742853 0.0828351 2.1040 0.0354013
## Empathy:birthyr -0.1413337 0.0832292 -1.6981 0.0895129
## Empathy:immigrant2 0.1294065 0.1740285 0.7436 0.4571383
## Empathy:educ -0.0074729 0.0824705 -0.0906 0.9278013
## Empathy:religpew2 0.1221212 0.2310012 0.5287 0.5970518
## Empathy:religpew3 0.5461304 0.4598498 1.1876 0.2350063
## Empathy:religpew4 -1.5472797 0.9574022 -1.6161 0.1060971
## Empathy:religpew5 -0.1239804 0.5561968 -0.2229 0.8236117
## Empathy:religpew6 -1.1167576 0.8126370 -1.3742 0.1693961
## Empathy:religpew7 0.3757942 0.7098026 0.5294 0.5965148
## Empathy:religpew8 0.3663116 0.3014876 1.2150 0.2243875
## Empathy:religpew9 0.4871033 0.3662620 1.3299 0.1835691
## Empathy:religpew10 0.3632006 0.3246153 1.1189 0.2632229
## Empathy:religpew11 -0.0601823 0.2407234 -0.2500 0.8025874
## Empathy:religpew12 0.2306497 0.3808652 0.6056 0.5447972
## Empathy:partyid3_namesIndependent -0.1652421 0.1985109 -0.8324 0.4051972
## Empathy:partyid3_namesNot Sure -0.0420201 0.3640958 -0.1154 0.9081227
## Empathy:partyid3_namesOther -0.0294113 0.7074132 -0.0416 0.9668376
## Empathy:partyid3_namesRepublican 0.1260873 0.2083608 0.6051 0.5450993
## Empathy:ethnocentric1 -0.0072736 0.0919294 -0.0791 0.9369374
##
## (Intercept) ***
## Empathy
## sex *
## birthyr ***
## immigrant2 **
## educ .
## religpew2
## religpew3
## religpew4
## religpew5
## religpew6 ***
## religpew7
## religpew8 ***
## religpew9
## religpew10
## religpew11
## religpew12
## partyid3_namesIndependent ***
## partyid3_namesNot Sure ***
## partyid3_namesOther .
## partyid3_namesRepublican ***
## ethnocentric1 ***
## Empathy:sex *
## Empathy:birthyr .
## Empathy:immigrant2
## Empathy:educ
## Empathy:religpew2
## Empathy:religpew3
## Empathy:religpew4
## Empathy:religpew5
## Empathy:religpew6
## Empathy:religpew7
## Empathy:religpew8
## Empathy:religpew9
## Empathy:religpew10

```

```
## Empathy:religpew11
## Empathy:religpew12
## Empathy:partyid3_namesIndependent
## Empathy:partyid3_namesNot Sure
## Empathy:partyid3_namesOther
## Empathy:partyid3_namesRepublican
## Empathy:ethnocentric1
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

No statistically significant effect.

### H15b: (Difference between Empathy and Persuasion in long term for accepting refugees who pass security screening)

The effects of the empathy treatment on favoring or opposing the U.S. taking in Syrian refugees will degrade significantly differently than the persuasion treatment over time. We use the `EmpathyPersuasion.data.w2` dataset, restricted to only individuals who answered the dependent variable questions in Wave 2.

```
##
## t test of coefficients:
##
##
```

	Estimate	Std. Error	t value	Pr(> t )
## (Intercept)	0.8258263	0.0378415	21.8233	< 2.2e-16
## Empathy	0.0105919	0.0555534	0.1907	0.848813
## sex	-0.0144920	0.0149815	-0.9673	0.333514
## birthyr	0.0748106	0.0146339	5.1121	3.532e-07
## immigrant2	-0.0666170	0.0308676	-2.1582	0.031051
## educ	0.0322399	0.0144819	2.2262	0.026125
## religpew2	0.0664710	0.0420168	1.5820	0.113827
## religpew3	0.0313676	0.1094352	0.2866	0.774428
## religpew4	0.2316771	0.1947641	1.1895	0.234393
## religpew5	-0.0475533	0.1120752	-0.4243	0.671400
## religpew6	0.2152992	0.1325623	1.6241	0.104526
## religpew7	0.1651991	0.1050302	1.5729	0.115928
## religpew8	0.1071124	0.0686074	1.5612	0.118648
## religpew9	0.0562060	0.0602541	0.9328	0.351043
## religpew10	0.0339304	0.0544497	0.6232	0.533267
## religpew11	-0.0507327	0.0437701	-1.1591	0.246584
## religpew12	-0.1353334	0.0652022	-2.0756	0.038077
## partyid3_namesIndependent	-0.2348030	0.0349138	-6.7252	2.363e-11
## partyid3_namesNot Sure	-0.2428783	0.0766572	-3.1684	0.001559
## partyid3_namesOther	-0.3628852	0.0971674	-3.7346	0.000194
## partyid3_namesRepublican	-0.3836259	0.0389067	-9.8601	< 2.2e-16
## ethnocentric1	-0.1070409	0.0155293	-6.8928	7.596e-12
## Empathy:sex	0.0049058	0.0209419	0.2343	0.814812
## Empathy:birthyr	-0.0372644	0.0216509	-1.7211	0.085400
## Empathy:immigrant2	-0.0094458	0.0445419	-0.2121	0.832080
## Empathy:educ	0.0230271	0.0208348	1.1052	0.269214
## Empathy:religpew2	-0.1000870	0.0617906	-1.6198	0.105459
## Empathy:religpew3	0.0916381	0.1734012	0.5285	0.597237
## Empathy:religpew4	-0.1418707	0.2489090	-0.5700	0.568771
## Empathy:religpew5	0.0062631	0.1397937	0.0448	0.964270
## Empathy:religpew6	-0.4396991	0.2767991	-1.5885	0.112350
## Empathy:religpew7	0.0306340	0.1563193	0.1960	0.844656
## Empathy:religpew8	0.1847181	0.0832477	2.2189	0.026621
## Empathy:religpew9	0.0896445	0.0822706	1.0896	0.276026

```

## Empathy:religpew10          0.0992225  0.0728706  1.3616  0.173490
## Empathy:religpew11          0.0163681  0.0603687  0.2711  0.786318
## Empathy:religpew12          0.0089723  0.0980779  0.0915  0.927121
## Empathy:partyid3_namesIndependent -0.0035836  0.0495460 -0.0723  0.942349
## Empathy:partyid3_namesNot Sure  0.0780424  0.0991492  0.7871  0.431317
## Empathy:partyid3_namesOther    0.3688389  0.1462189  2.5225  0.011740
## Empathy:partyid3_namesRepublican 0.0637131  0.0567677  1.1223  0.261868
## Empathy:ethnocentric1         0.0010875  0.0221576  0.0491  0.960859
##
## (Intercept)                  ***
## Empathy
## sex
## birthyr                      ***
## immigrant2                    *
## educ                          *
## religpew2
## religpew3
## religpew4
## religpew5
## religpew6
## religpew7
## religpew8
## religpew9
## religpew10
## religpew11
## religpew12                   *
## partyid3_namesIndependent     ***
## partyid3_namesNot Sure        **
## partyid3_namesOther           ***
## partyid3_namesRepublican       ***
## ethnocentric1                 ***
## Empathy:sex
## Empathy:birthyr               .
## Empathy:immigrant2
## Empathy:educ
## Empathy:religpew2
## Empathy:religpew3
## Empathy:religpew4
## Empathy:religpew5
## Empathy:religpew6
## Empathy:religpew7
## Empathy:religpew8            *
## Empathy:religpew9
## Empathy:religpew10
## Empathy:religpew11
## Empathy:religpew12
## Empathy:partyid3_namesIndependent
## Empathy:partyid3_namesNot Sure
## Empathy:partyid3_namesOther    *
## Empathy:partyid3_namesRepublican
## Empathy:ethnocentric1
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

No statistically significant difference between Empathy/Persuasion effects on screening (Y4) in long term.

### H15c: (Difference between Empathy and Persuasion in long term for writing a letter)

The effects of the empathy treatment on sending an anonymous letter to the White House will degrade significantly differently than the persuasion treatment over time. We use the `EmpathyPersuasion.data.w2` dataset, restricted to only individuals who answered the dependent variable questions in Wave 2.

```
##
## Call:
## lm(formula = Y6_new ~ Empathy + sex + Empathy * sex + birthyr +
##      Empathy * birthyr + immigrant2 + Empathy * immigrant2 + educ +
##      Empathy * educ + religpew + Empathy * religpew + partyid3_names +
##      Empathy * partyid3_names + ethnocentric1 + Empathy * ethnocentric1,
##      data = EmpathyPersuasion.data.w2)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -0.66426 -0.24259 -0.11807  0.04676  1.07991
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)      0.295739   0.034143   8.662 < 2e-16
## Empathy           0.027982   0.049340   0.567  0.57070
## sex              -0.001159   0.013205  -0.088  0.93008
## birthyr          -0.010204   0.013524  -0.754  0.45066
## immigrant2        -0.050426   0.027508  -1.833  0.06696
## educ              0.039061   0.013216   2.956  0.00316
## religpew2         -0.019968   0.036078  -0.553  0.58002
## religpew3         -0.022417   0.099837  -0.225  0.82237
## religpew4         -0.154133   0.190941  -0.807  0.41964
## religpew5         -0.124807   0.092273  -1.353  0.17636
## religpew6          0.187963   0.136815   1.374  0.16966
## religpew7          0.196682   0.136600   1.440  0.15009
## religpew8          0.686142   0.268544   2.555  0.01070
## religpew9          0.170232   0.060640   2.807  0.00505
## religpew10         0.106671   0.054068   1.973  0.04866
## religpew11         0.015531   0.037472   0.414  0.67859
## religpew12         0.044336   0.056505   0.785  0.43277
## partyid3_namesIndependent -0.069105   0.031464  -2.196  0.02820
## partyid3_namesNot Sure   -0.147816   0.059934  -2.466  0.01375
## partyid3_namesOther     -0.110927   0.089796  -1.235  0.21688
## partyid3_namesRepublican -0.177667   0.033354  -5.327 1.13e-07
## ethnocentric1         -0.089393   0.012904  -6.927 6.00e-12
## Empathy:sex           0.010098   0.018478   0.547  0.58478
## Empathy:birthyr       0.007398   0.019405   0.381  0.70305
## Empathy:immigrant2     0.037572   0.039293   0.956  0.33910
## Empathy:educ           0.008625   0.018642   0.463  0.64366
## Empathy:religpew2      0.018227   0.051589   0.353  0.72390
## Empathy:religpew3      0.016155   0.146259   0.110  0.91206
## Empathy:religpew4      0.342638   0.238981   1.434  0.15182
## Empathy:religpew5      0.121925   0.122918   0.992  0.32137
## Empathy:religpew6     -0.135648   0.219100  -0.619  0.53592
## Empathy:religpew7      0.019709   0.192947   0.102  0.91865
## Empathy:religpew8     -0.929848   0.463242  -2.007  0.04487
## Empathy:religpew9     -0.102064   0.084853  -1.203  0.22920
## Empathy:religpew10    -0.071340   0.077495  -0.921  0.35740
## Empathy:religpew11    -0.055614   0.051979  -1.070  0.28480
## Empathy:religpew12     0.011783   0.081988   0.144  0.88574
```

```

## Empathy:partyid3_namesIndependent -0.039533 0.044296 -0.892 0.37226
## Empathy:partyid3_namesNot Sure -0.101040 0.081823 -1.235 0.21705
## Empathy:partyid3_namesOther 0.063867 0.140511 0.455 0.64950
## Empathy:partyid3_namesRepublican -0.061209 0.047929 -1.277 0.20174
## Empathy:ethnocentric1 0.007554 0.018608 0.406 0.68485
##
## (Intercept) ***
## Empathy
## sex
## birthyr
## immigrant2 .
## educ **
## religpew2
## religpew3
## religpew4
## religpew5
## religpew6
## religpew7
## religpew8 *
## religpew9 **
## religpew10 *
## religpew11
## religpew12
## partyid3_namesIndependent *
## partyid3_namesNot Sure *
## partyid3_namesOther
## partyid3_namesRepublican ***
## ethnocentric1 ***
## Empathy:sex
## Empathy:birthyr
## Empathy:immigrant2
## Empathy:educ
## Empathy:religpew2
## Empathy:religpew3
## Empathy:religpew4
## Empathy:religpew5
## Empathy:religpew6
## Empathy:religpew7
## Empathy:religpew8 *
## Empathy:religpew9
## Empathy:religpew10
## Empathy:religpew11
## Empathy:religpew12
## Empathy:partyid3_namesIndependent
## Empathy:partyid3_namesNot Sure
## Empathy:partyid3_namesOther
## Empathy:partyid3_namesRepublican
## Empathy:ethnocentric1
## ---
## Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.3753 on 1758 degrees of freedom
## Multiple R-squared: 0.1576, Adjusted R-squared: 0.1379
## F-statistic: 8.022 on 41 and 1758 DF, p-value: < 2.2e-16

```

No statistically significant effect of Empathy on Y6 in long term.

End of PAP analysis.



# Analysis outside of PAP

## Summary statistics

% of overall sample, of dems, of reps and of indeps who wrote a positive letter in control and then in each condition.

```
prop.table(table(data$partyid3_names,data$Y6_new, data$treatment))
```

```
## , , = Control
##
##
##           0           1
## Democrat   0.0820370370 0.0340740741
## Independent 0.0907407407 0.0220370370
## Not Sure    0.0196296296 0.0014814815
## Other       0.0016666667 0.0007407407
## Republican  0.0764814815 0.0044444444
##
## , , = Empathy
##
##
##           0           1
## Democrat   0.0750000000 0.0375925926
## Independent 0.0907407407 0.0237037037
## Not Sure    0.0192592593 0.0016666667
## Other       0.0018518519 0.0009259259
## Republican  0.0772222222 0.0053703704
##
## , , = Persuasion
##
##
##           0           1
## Democrat   0.0916666667 0.0342592593
## Independent 0.0816666667 0.0205555556
## Not Sure    0.0166666667 0.0016666667
## Other       0.0050000000 0.0011111111
## Republican  0.0759259259 0.0048148148
```

Looking at just the Control group, baseline Y6, Y2, Y1 values by party:

```
#Y6
```

```
t.test(data.w1$Y6_new[data.w1$partyid3_names=="Democrat"&data.w1$Treatment_Group_names=="Control Wave 1"])
```

```
##
## One Sample t-test
##
## data: data.w1$Y6_new[data.w1$partyid3_names == "Democrat" & data.w1$Treatment_Group_names == "Control Wave 1"]
## t = 9.6638, df = 310, p-value < 2.2e-16
## alternative hypothesis: true mean is not equal to 0
## 95 percent confidence interval:
##  0.1843733 0.2786492
## sample estimates:
## mean of x
## 0.2315113
```

```
t.test(data.w1$Y6_new[data.w1$partyid3_names=="Republican"&data.w1$Treatment_Group_names=="Control Wave 1"])
```

```

##
## One Sample t-test
##
## data: data.w1$Y6_new[data.w1$partyid3_names == "Republican" & data.w1$Treatment_Group_names == "Control Wave 1"]
## t = 3.2303, df = 216, p-value = 0.00143
## alternative hypothesis: true mean is not equal to 0
## 95 percent confidence interval:
## 0.01796479 0.07420111
## sample estimates:
## mean of x
## 0.04608295

t.test(data.w1$Y6_new[data.w1$partyid3_names=="Independent"&data.w1$Treatment_Group_names=="Control Wave 1"])

##
## One Sample t-test
##
## data: data.w1$Y6_new[data.w1$partyid3_names == "Independent" & data.w1$Treatment_Group_names == "Control Wave 1"]
## t = 9.1268, df = 313, p-value < 2.2e-16
## alternative hypothesis: true mean is not equal to 0
## 95 percent confidence interval:
## 0.1648777 0.2555045
## sample estimates:
## mean of x
## 0.2101911

#Y2
t.test(data.y2.w1$y2[data.y2.w1$partyid3_names=="Democrat"&data.y2.w1$Treatment_Group_names=="Control Wave 1"])

##
## One Sample t-test
##
## data: data.y2.w1$y2[data.y2.w1$partyid3_names == "Democrat" & data.y2.w1$Treatment_Group_names == "Control Wave 1"]
## t = 138.64, df = 1865, p-value < 2.2e-16
## alternative hypothesis: true mean is not equal to 0
## 95 percent confidence interval:
## 5.251021 5.401712
## sample estimates:
## mean of x
## 5.326367

t.test(data.y2.w1$y2[data.y2.w1$partyid3_names=="Republican"&data.y2.w1$Treatment_Group_names=="Control Wave 1"])

##
## One Sample t-test
##
## data: data.y2.w1$y2[data.y2.w1$partyid3_names == "Republican" & data.y2.w1$Treatment_Group_names == "Control Wave 1"]
## t = 75.168, df = 1301, p-value < 2.2e-16
## alternative hypothesis: true mean is not equal to 0
## 95 percent confidence interval:
## 3.818561 4.023221
## sample estimates:
## mean of x
## 3.920891

t.test(data.y2.w1$y2[data.y2.w1$partyid3_names=="Independent"&data.y2.w1$Treatment_Group_names=="Control Wave 1"])

##
## One Sample t-test
##

```

```
## data: data.y2.w1$y2[data.y2.w1$partyid3_names == "Independent" & data.y2.w1$Treatment_Group_names ==
## t = 97.525, df = 1883, p-value < 2.2e-16
## alternative hypothesis: true mean is not equal to 0
## 95 percent confidence interval:
## 4.327848 4.505486
## sample estimates:
## mean of x
## 4.416667
```

Subsection in paper on magnitudes under “Information”: For example, Republicans exposed to the information treatment held significantly more negative favorability ratings of refugees than Republicans in our control condition. The magnitude of the effect is larger than that of our empathy treatment

```
t.test(y2~Persuasion,
       data=ControlPersuasion.data.y2.w1[ControlPersuasion.data.y2.w1$partyid3_names=="Republican",])
```

```
##
## Welch Two Sample t-test
##
## data: y2 by Persuasion
## t = 3.9972, df = 2586.2, p-value = 6.589e-05
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## 0.1528114 0.4471100
## sample estimates:
## mean in group 0 mean in group 1
## 3.920891 3.620930
```

```
t.test(y2~Empathy,
       data=ControlEmpathy.data.y2.w1[ControlEmpathy.data.y2.w1$partyid3_names=="Republican",])
```

```
##
## Welch Two Sample t-test
##
## data: y2 by Empathy
## t = 2.1551, df = 2584.8, p-value = 0.03125
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## 0.01495167 0.31684557
## sample estimates:
## mean in group 0 mean in group 1
## 3.920891 3.754992
```

### Magnitudes of effects, taking a closer look.

The results of the experiment demonstrate that Empathy can move Democrats towards writing more letters. We take a closer look at letter writing behavior in the Control groups for each of the parties.

```
table(data$treatment,data$Y6_new,data$partyid3_names)
```

```
## , , = Democrat
##
##
##      0      1
## Control 443 184
## Empathy 405 203
## Persuasion 495 185
##
## , , = Independent
```

```
##
##
##           0    1
## Control    490 119
## Empathy    490 128
## Persuasion 441 111
##
## , , = Not Sure
##
##
##           0    1
## Control    106  8
## Empathy    104  9
## Persuasion  90  9
##
## , , = Other
##
##
##           0    1
## Control     9  4
## Empathy    10  5
## Persuasion 27  6
##
## , , = Republican
##
##
##           0    1
## Control    413 24
## Empathy    417 29
## Persuasion 410 26
```

Democrats are at a baseline 29.3% willing to write positive letters in the Control group. They're 33.4% willing to write positive letters in the Empathy group. Independents are at a baseline 19.5% willing to write positive letters in the Control group. They're 20.7% willing to write positive letters in the Empathy group. Republicans are at a baseline 5.5% willing to write positive letters in the Control group. They're 6.5% willing to write positive letters in the Empathy group.

Now just letter writing in general:

Democrats are at a baseline 29.3% willing to write letters in the Control group. They're 33.4% willing to write letters in the Empathy group. (same as above) Independents are at a baseline 19.5% willing to write letters in the Control group. They're 20.7% willing to write letters in the Empathy group. (same as above) Republicans are at a baseline 5.5% willing to write letters in the Control group. They're 6.5% willing to write letters in the Empathy group.

### Specific notes for text:

Abstract: t-test effect of Empathy for Empathy-Control on Y6

```
t.test(Y6_new~Empathy, data=ControlEmpathy.data.w1)
```

```
##
## Welch Two Sample t-test
##
## data: Y6_new by Empathy
## t = -2.4634, df = 1783, p-value = 0.01386
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## -0.081825830 -0.009285281
```

```
## sample estimates:
## mean in group 0 mean in group 1
##      0.1677778      0.2133333
```

Proportion of people in control who wrote positive letter

```
table(data$treatment,data$Y6_new)
```

```
##
##           0    1
## Control  1461 339
## Empathy  1426 374
## Persuasion 1463 337
```

```
339/(1461+339)
```

```
## [1] 0.1883333
```

```
#for just wave 1
```

```
table(data.w1$treatment,data.w1$Y6_new)
```

```
##
##           0    1
## Control   749 151
## Empathy   708 192
## Persuasion 751 149
```

```
151/(151+749)
```

```
## [1] 0.1677778
```

Proportion of people in Empathy group who wrote positive letter

```
table(data$treatment,data$Y6_new)
```

```
##
##           0    1
## Control  1461 339
## Empathy  1426 374
## Persuasion 1463 337
```

```
374/(374+1426)
```

```
## [1] 0.2077778
```

```
#for just wave 1
```

```
table(data.w1$treatment,data.w1$Y6_new)
```

```
##
##           0    1
## Control   749 151
## Empathy   708 192
## Persuasion 751 149
```

```
192/(192+708)
```

```
## [1] 0.2133333
```

## Backlash: Persuasion might have a backlash effect on republicans

First let's take a look at some t.tests to double check whether there's a backlash effect with the Empathy/Persuasion treatments amongst certain party identities. The backlash variable is `survey_neg`. First, let's take a look at Empathy:

```

##tests
t.test(survey_neg~treatment, ControlEmpathy.data.w1[ControlEmpathy.data.w1$partyid3_names=="Democrat",],con

##
## Welch Two Sample t-test
##
## data: survey_neg by treatment
## t = -1.0024, df = 496.96, p-value = 0.3166
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## -0.019035304 0.006173568
## sample estimates:
## mean in group Control mean in group Empathy
## 0.003215434 0.009646302

t.test(survey_neg~treatment, ControlEmpathy.data.w1[ControlEmpathy.data.w1$partyid3_names=="Republican",],c

##
## Welch Two Sample t-test
##
## data: survey_neg by treatment
## t = -0.30542, df = 431.43, p-value = 0.7602
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## -0.06852741 0.05009423
## sample estimates:
## mean in group Control mean in group Empathy
## 0.1059908 0.1152074

t.test(survey_neg~treatment, ControlEmpathy.data.w1[ControlEmpathy.data.w1$partyid3_names=="Independent",],

##
## Welch Two Sample t-test
##
## data: survey_neg by treatment
## t = 0.90709, df = 616.75, p-value = 0.3647
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## -0.02202347 0.05983303
## sample estimates:
## mean in group Control mean in group Empathy
## 0.08280255 0.06389776

## full PAP specified-esque regressions
back1 <- lm(survey_neg~Empathy+sex+Empathy*sex+birthyr+Empathy*birthyr+immigrant2+Empathy*immigrant2+educ+E
clx(back1)

##
## t test of coefficients:
##
##
## Estimate Std. Error t value Pr(>|t|)
## (Intercept) 0.0142015 0.0156159 0.9094 0.3632521
## Empathy 0.0191497 0.0219978 0.8705 0.3841322
## sex 0.0180128 0.0077444 2.3259 0.0201361
## birthyr -0.0143419 0.0070851 -2.0242 0.0430984
## immigrant2 0.0019267 0.0160874 0.1198 0.9046851
## educ 0.0148499 0.0089572 1.6579 0.0975197
## religpew2 0.0029041 0.0237867 0.1221 0.9028421
## religpew3 -0.0213295 0.0570755 -0.3737 0.7086680

```

```

## religpew4          0.0694325  0.1122541  0.6185 0.5363066
## religpew5         -0.0386418  0.0411404 -0.9393 0.3477231
## religpew6         -0.0091431  0.0174561 -0.5238 0.6004986
## religpew7          0.0443340  0.1243233  0.3566 0.7214320
## religpew8         -0.1364406  0.0297259 -4.5899 4.748e-06
## religpew9         -0.0348678  0.0249170 -1.3994 0.1618829
## religpew10        -0.0217551  0.0264876 -0.8213 0.4115678
## religpew11        -0.0299039  0.0184937 -1.6170 0.1060635
## religpew12         0.0435873  0.0437383  0.9965 0.3191209
## partyid3_namesIndependent 0.0727001  0.0155963  4.6614 3.378e-06
## partyid3_namesNot Sure   0.0138907  0.0092642  1.4994 0.1339508
## partyid3_namesOther      0.0301328  0.0205228  1.4683 0.1422128
## partyid3_namesRepublican 0.0936401  0.0215565  4.3439 1.479e-05
## ethnocentric1          0.0135911  0.0075619  1.7973 0.0724556
## Empathy:sex            0.0014146  0.0112152  0.1261 0.8996441
## Empathy:birthyr       -0.0071430  0.0102368 -0.6978 0.4854103
## Empathy:immigrant2     -0.0268971  0.0232078 -1.1590 0.2466255
## Empathy:educ          -0.0107267  0.0125775 -0.8528 0.3938616
## Empathy:religpew2     -0.0076956  0.0324124 -0.2374 0.8123535
## Empathy:religpew3      0.0198128  0.1061145  0.1867 0.8519084
## Empathy:religpew4     -0.0016522  0.1713036 -0.0096 0.9923059
## Empathy:religpew5      0.0042948  0.0604053  0.0711 0.9433262
## Empathy:religpew6     -0.0363553  0.0315252 -1.1532 0.2489793
## Empathy:religpew7      0.0195604  0.1663674  0.1176 0.9064192
## Empathy:religpew8      0.1244663  0.0371779  3.3479 0.0008316
## Empathy:religpew9      0.0117044  0.0332348  0.3522 0.7247501
## Empathy:religpew10    -0.0225158  0.0299220 -0.7525 0.4518615
## Empathy:religpew11     0.0291997  0.0284158  1.0276 0.3042855
## Empathy:religpew12    -0.0138442  0.0600542 -0.2305 0.8177080
## Empathy:partyid3_namesIndependent -0.0228597  0.0212342 -1.0765 0.2818294
## Empathy:partyid3_namesNot Sure   0.0268856  0.0291166  0.9234 0.3559375
## Empathy:partyid3_namesOther    -0.0371587  0.0315532 -1.1777 0.2390954
## Empathy:partyid3_namesRepublican 0.0053157  0.0314160  0.1692 0.8656560
## Empathy:ethnocentric1 -0.0097426  0.0104292 -0.9342 0.3503447
##
## (Intercept)
## Empathy
## sex                  *
## birthyr              *
## immigrant2
## educ                  .
## religpew2
## religpew3
## religpew4
## religpew5
## religpew6
## religpew7
## religpew8            ***
## religpew9
## religpew10
## religpew11
## religpew12
## partyid3_namesIndependent      ***
## partyid3_namesNot Sure
## partyid3_namesOther
## partyid3_namesRepublican      ***
## ethnocentric1                  .

```

```

## Empathy:sex
## Empathy:birthyr
## Empathy:immigrant2
## Empathy:educ
## Empathy:religpew2
## Empathy:religpew3
## Empathy:religpew4
## Empathy:religpew5
## Empathy:religpew6
## Empathy:religpew7
## Empathy:religpew8          ***
## Empathy:religpew9
## Empathy:religpew10
## Empathy:religpew11
## Empathy:religpew12
## Empathy:partyid3_namesIndependent
## Empathy:partyid3_namesNot Sure
## Empathy:partyid3_namesOther
## Empathy:partyid3_namesRepublican
## Empathy:ethnocentric1
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

#with weights
back1 <- lm(survey_neg~Empathy+sex+Empathy*sex+birthyr+Empathy*birthyr+immigrant2+Empathy*immigrant2+educ
c1x(back1)

##
## t test of coefficients:
##
##               Estimate Std. Error t value
## (Intercept)      0.01116520  0.01476314  0.7563
## Empathy           0.01810874  0.02356512  0.7685
## sex               0.01151743  0.00760288  1.5149
## birthyr          -0.01302318  0.00712262 -1.8284
## immigrant2        0.00011235  0.01519130  0.0074
## educ              0.02172628  0.00987275  2.2006
## religpew2        -0.00554110  0.02281193 -0.2429
## religpew3        -0.03631844  0.05054486 -0.7185
## religpew4         0.06544078  0.11043152  0.5926
## religpew5        -0.05121108  0.03649146 -1.4034
## religpew6         0.01196953  0.01945904  0.6151
## religpew7        -0.00520541  0.06566225 -0.0793
## religpew8        -0.12737029  0.03142470 -4.0532
## religpew9        -0.02231321  0.02613609 -0.8537
## religpew10       -0.02857590  0.02182682 -1.3092
## religpew11       -0.02218149  0.01918122 -1.1564
## religpew12       0.04309904  0.05451025  0.7907
## partyid3_namesIndependent 0.07226035  0.01676862  4.3093
## partyid3_namesNot Sure    0.01984980  0.01188788  1.6698
## partyid3_namesOther      0.04672531  0.02370467  1.9711
## partyid3_namesRepublican  0.08584738  0.02108741  4.0710
## ethnocentric1          0.01622327  0.00889766  1.8233
## Empathy:sex            0.01152126  0.01376784  0.8368
## Empathy:birthyr       -0.01611600  0.01249773 -1.2895
## Empathy:immigrant2     -0.01641193  0.02728471 -0.6015
## Empathy:educ          -0.01633420  0.01476421 -1.1063
## Empathy:religpew2      0.01842884  0.04038790  0.4563

```



## Empathy:religpew3	0.03167778	0.11170590	0.2836
## Empathy:religpew4	-0.01984313	0.14206343	-0.1397
## Empathy:religpew5	0.03974974	0.07652580	0.5194
## Empathy:religpew6	-0.04143429	0.03740875	-1.1076
## Empathy:religpew7	0.00884913	0.09320141	0.0949
## Empathy:religpew8	0.13851220	0.04308649	3.2147
## Empathy:religpew9	-0.00712352	0.03649779	-0.1952
## Empathy:religpew10	-0.01544243	0.02851233	-0.5416
## Empathy:religpew11	0.02281406	0.03683608	0.6193
## Empathy:religpew12	-0.01195108	0.07196419	-0.1661
## Empathy:partyid3_namesIndependent	-0.03600486	0.02436880	-1.4775
## Empathy:partyid3_namesNot Sure	0.06447505	0.08236898	0.7828
## Empathy:partyid3_namesOther	-0.04789920	0.03502426	-1.3676
## Empathy:partyid3_namesRepublican	0.00558602	0.03445625	0.1621
## Empathy:ethnocentric1	-0.01487120	0.01166358	-1.2750
##	Pr(> t )		
## (Intercept)	0.449578		
## Empathy	0.442320		
## sex	0.129983		
## birthyr	0.067655	.	
## immigrant2	0.994100		
## educ	0.027892	*	
## religpew2	0.808108		
## religpew3	0.472521		
## religpew4	0.553531		
## religpew5	0.160683		
## religpew6	0.538559		
## religpew7	0.936822		
## religpew8	5.273e-05	***	
## religpew9	0.393370		
## religpew10	0.190634		
## religpew11	0.247668		
## religpew12	0.429249		
## partyid3_namesIndependent	1.729e-05	***	
## partyid3_namesNot Sure	0.095147	.	
## partyid3_namesOther	0.048864	*	
## partyid3_namesRepublican	4.888e-05	***	
## ethnocentric1	0.068425	.	
## Empathy:sex	0.402805		
## Empathy:birthyr	0.197389		
## Empathy:immigrant2	0.547580		
## Empathy:educ	0.268732		
## Empathy:religpew2	0.648234		
## Empathy:religpew3	0.776764		
## Empathy:religpew4	0.888930		
## Empathy:religpew5	0.603527		
## Empathy:religpew6	0.268182		
## Empathy:religpew7	0.924368		
## Empathy:religpew8	0.001329	**	
## Empathy:religpew9	0.845277		
## Empathy:religpew10	0.588159		
## Empathy:religpew11	0.535773		
## Empathy:religpew12	0.868121		
## Empathy:partyid3_namesIndependent	0.139721		
## Empathy:partyid3_namesNot Sure	0.433874		
## Empathy:partyid3_namesOther	0.171612		
## Empathy:partyid3_namesRepublican	0.871231		

```
## Empathy:ethnocentric1          0.202474
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
#no change, no effect
```

No backlash effect.

Now let's take a look at Persuasion:

```
#ttests
t.test(survey_neg~treatment, ControlPersuasion.data.w1[ControlPersuasion.data.w1$partyid3_names=="Democrat"],
data = survey_neg by treatment
## Welch Two Sample t-test
## data: survey_neg by treatment
## t = -0.48898, df = 638, p-value = 0.625
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## -0.012698627 0.007635242
## sample estimates:
## mean in group Control mean in group Persuasion
## 0.003215434 0.005747126
t.test(survey_neg~treatment, ControlPersuasion.data.w1[ControlPersuasion.data.w1$partyid3_names=="Republican"],
data = survey_neg by treatment
## Welch Two Sample t-test
## data: survey_neg by treatment
## t = -1.989, df = 411.79, p-value = 0.04736
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## -0.1314308136 -0.0007736661
## sample estimates:
## mean in group Control mean in group Persuasion
## 0.1059908 0.1720930
t.test(survey_neg~treatment, ControlPersuasion.data.w1[ControlPersuasion.data.w1$partyid3_names=="Independent"],
data = survey_neg by treatment
## Welch Two Sample t-test
## data: survey_neg by treatment
## t = 1.7165, df = 576.64, p-value = 0.08661
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## -0.005024153 0.074688289
## sample estimates:
## mean in group Control mean in group Persuasion
## 0.08280255 0.04797048
## full PAP specified-esque regressions
back2 <- lm(survey_neg~Persuasion+sex+Persuasion*sex+birthyr+Persuasion*birthyr+immigrant2+Persuasion*immigrant2)
clx(back2)

##
## t test of coefficients:
##
## Estimate Std. Error t value
```

## (Intercept)	0.0142015	0.0156159	0.9094
## Persuasion	-0.0040193	0.0237516	-0.1692
## sex	0.0180128	0.0077444	2.3259
## birthyr	-0.0143419	0.0070851	-2.0242
## immigrant2	0.0019267	0.0160874	0.1198
## educ	0.0148499	0.0089572	1.6579
## religpew2	0.0029041	0.0237867	0.1221
## religpew3	-0.0213295	0.0570755	-0.3737
## religpew4	0.0694325	0.1122541	0.6185
## religpew5	-0.0386418	0.0411404	-0.9393
## religpew6	-0.0091431	0.0174561	-0.5238
## religpew7	0.0443340	0.1243233	0.3566
## religpew8	-0.1364406	0.0297259	-4.5899
## religpew9	-0.0348678	0.0249170	-1.3994
## religpew10	-0.0217551	0.0264876	-0.8213
## religpew11	-0.0299039	0.0184937	-1.6170
## religpew12	0.0435873	0.0437383	0.9965
## partyid3_namesIndependent	0.0727001	0.0155963	4.6614
## partyid3_namesNot Sure	0.0138907	0.0092642	1.4994
## partyid3_namesOther	0.0301328	0.0205228	1.4683
## partyid3_namesRepublican	0.0936401	0.0215565	4.3439
## ethnocentric1	0.0135911	0.0075619	1.7973
## Persuasion:sex	-0.0024537	0.0113455	-0.2163
## Persuasion:birthyr	-0.0172020	0.0106382	-1.6170
## Persuasion:immigrant2	-0.0207893	0.0237751	-0.8744
## Persuasion:educ	-0.0075103	0.0125202	-0.5999
## Persuasion:religpew2	0.0312921	0.0355698	0.8797
## Persuasion:religpew3	0.2500479	0.1789466	1.3973
## Persuasion:religpew4	-0.1202205	0.1159065	-1.0372
## Persuasion:religpew5	0.0896656	0.0691823	1.2961
## Persuasion:religpew6	-0.0374251	0.0367660	-1.0179
## Persuasion:religpew7	-0.0832896	0.1272485	-0.6545
## Persuasion:religpew9	0.0246032	0.0349030	0.7049
## Persuasion:religpew10	0.0155068	0.0402379	0.3854
## Persuasion:religpew11	0.0430626	0.0277666	1.5509
## Persuasion:religpew12	-0.0295647	0.0533060	-0.5546
## Persuasion:partyid3_namesIndependent	-0.0337765	0.0210098	-1.6077
## Persuasion:partyid3_namesNot Sure	0.0471529	0.0305136	1.5453
## Persuasion:partyid3_namesOther	0.1478981	0.0910130	1.6250
## Persuasion:partyid3_namesRepublican	0.0640571	0.0335351	1.9102
## Persuasion:ethnocentric1	-0.0081355	0.0103285	-0.7877
##	Pr(> t )		
## (Intercept)	0.36325		
## Persuasion	0.86564		
## sex	0.02014 *		
## birthyr	0.04310 *		
## immigrant2	0.90469		
## educ	0.09752 .		
## religpew2	0.90284		
## religpew3	0.70867		
## religpew4	0.53631		
## religpew5	0.34772		
## religpew6	0.60050		
## religpew7	0.72143		
## religpew8	4.748e-06 ***		
## religpew9	0.16188		
## religpew10	0.41157		

```
## religpew11 0.10606
## religpew12 0.31912
## partyid3_namesIndependent 3.377e-06 ***
## partyid3_namesNot Sure 0.13395
## partyid3_namesOther 0.14221
## partyid3_namesRepublican 1.479e-05 ***
## ethnocentric1 0.07246 .
## Persuasion:sex 0.82880
## Persuasion:birthyr 0.10606
## Persuasion:immigrant2 0.38201
## Persuasion:educ 0.54868
## Persuasion:religpew2 0.37912
## Persuasion:religpew3 0.16249
## Persuasion:religpew4 0.29978
## Persuasion:religpew5 0.19512
## Persuasion:religpew6 0.30885
## Persuasion:religpew7 0.51285
## Persuasion:religpew9 0.48096
## Persuasion:religpew10 0.70000
## Persuasion:religpew11 0.12111
## Persuasion:religpew12 0.57922
## Persuasion:partyid3_namesIndependent 0.10809
## Persuasion:partyid3_namesNot Sure 0.12245
## Persuasion:partyid3_namesOther 0.10434
## Persuasion:partyid3_namesRepublican 0.05628 .
## Persuasion:ethnocentric1 0.43099
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

*#with weights*

```
back2 <- lm(survey_neg~Persuasion+sex+Persuasion*sex+birthyr+Persuasion*birthyr+immigrant2+Persuasion*immigrant2+
c1x(back2))
```

```
##
## t test of coefficients:
##
## Estimate Std. Error t value
## (Intercept) 0.01116520 0.01476314 0.7563
## Persuasion -0.01383317 0.02346372 -0.5896
## sex 0.01151743 0.00760288 1.5149
## birthyr -0.01302318 0.00712262 -1.8284
## immigrant2 0.00011235 0.01519130 0.0074
## educ 0.02172628 0.00987275 2.2006
## religpew2 -0.00554110 0.02281193 -0.2429
## religpew3 -0.03631844 0.05054486 -0.7185
## religpew4 0.06544078 0.11043152 0.5926
## religpew5 -0.05121108 0.03649146 -1.4034
## religpew6 0.01196953 0.01945904 0.6151
## religpew7 -0.00520541 0.06566225 -0.0793
## religpew8 -0.12737029 0.03142470 -4.0532
## religpew9 -0.02231321 0.02613609 -0.8537
## religpew10 -0.02857590 0.02182682 -1.3092
## religpew11 -0.02218149 0.01918122 -1.1564
## religpew12 0.04309904 0.05451025 0.7907
## partyid3_namesIndependent 0.07226035 0.01676862 4.3093
## partyid3_namesNot Sure 0.01984980 0.01188788 1.6698
## partyid3_namesOther 0.04672531 0.02370467 1.9711
## partyid3_namesRepublican 0.08584738 0.02108741 4.0710
```

## ethnocentric1	0.01622327	0.00889766	1.8233
## Persuasion:sex	0.00612255	0.01190350	0.5143
## Persuasion:birthyr	-0.02035583	0.01069517	-1.9033
## Persuasion:immigrant2	-0.02011922	0.02367902	-0.8497
## Persuasion:educ	-0.01535344	0.01359766	-1.1291
## Persuasion:religpew2	0.05779345	0.03759088	1.5374
## Persuasion:religpew3	0.29783626	0.17848136	1.6687
## Persuasion:religpew4	-0.07787884	0.11449208	-0.6802
## Persuasion:religpew5	0.11473623	0.08064177	1.4228
## Persuasion:religpew6	-0.03043772	0.03863130	-0.7879
## Persuasion:religpew7	-0.04054141	0.07344492	-0.5520
## Persuasion:religpew9	0.00980906	0.03714164	0.2641
## Persuasion:religpew10	0.03445918	0.04460534	0.7725
## Persuasion:religpew11	0.03250659	0.02674241	1.2155
## Persuasion:religpew12	-0.02648575	0.06322453	-0.4189
## Persuasion:partyid3_namesIndependent	-0.02469189	0.02408266	-1.0253
## Persuasion:partyid3_namesNot Sure	0.03786073	0.02631516	1.4387
## Persuasion:partyid3_namesOther	0.18751457	0.14454789	1.2972
## Persuasion:partyid3_namesRepublican	0.08342673	0.03429838	2.4324
## Persuasion:ethnocentric1	-0.01573813	0.01158696	-1.3583
##	Pr(> t )		
## (Intercept)	0.44958		
## Persuasion	0.55556		
## sex	0.12998		
## birthyr	0.06766	.	
## immigrant2	0.99410		
## educ	0.02789	*	
## religpew2	0.80811		
## religpew3	0.47252		
## religpew4	0.55353		
## religpew5	0.16068		
## religpew6	0.53856		
## religpew7	0.93682		
## religpew8	5.273e-05	***	
## religpew9	0.39337		
## religpew10	0.19063		
## religpew11	0.24767		
## religpew12	0.42925		
## partyid3_namesIndependent	1.729e-05	***	
## partyid3_namesNot Sure	0.09515	.	
## partyid3_namesOther	0.04886	*	
## partyid3_namesRepublican	4.888e-05	***	
## ethnocentric1	0.06842	.	
## Persuasion:sex	0.60707		
## Persuasion:birthyr	0.05717	.	
## Persuasion:immigrant2	0.39563		
## Persuasion:educ	0.25900		
## Persuasion:religpew2	0.12437		
## Persuasion:religpew3	0.09535	.	
## Persuasion:religpew4	0.49646		
## Persuasion:religpew5	0.15497		
## Persuasion:religpew6	0.43086		
## Persuasion:religpew7	0.58102		
## Persuasion:religpew9	0.79173		
## Persuasion:religpew10	0.43990		
## Persuasion:religpew11	0.22432		
## Persuasion:religpew12	0.67533		

```
## Persuasion:partyid3_namesIndependent 0.30536
## Persuasion:partyid3_namesNot Sure 0.15040
## Persuasion:partyid3_namesOther 0.19472
## Persuasion:partyid3_namesRepublican 0.01510 *
## Persuasion:ethnocentric1 0.17455
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

There is an interaction effect of Persuasion:partyid3\_namesRepublican on backlash: 0.08342673 (pvalue=0.01510).

### Full regression on backlash (with triple interaction on treatment, partyid, wave)

```
#Empathy
back7<-lm(survey_neg~ Empathy+sex+Empathy*sex+birthyr+Empathy*birthyr+immigrant2+Empathy*immigrant2+educ+Em
clx(back7)
```

```
##
## t test of coefficients:
##
##               Estimate Std. Error t value
## (Intercept)      0.01854807  0.01118976  1.6576
## Empathy           0.01898215  0.01680824  1.1293
## sex               0.01922233  0.00522097  3.6818
## birthyr          -0.01793748  0.00493351 -3.6358
## immigrant2        -0.00617532  0.01083271 -0.5701
## educ              0.00694380  0.00583432  1.1902
## religpew2         -0.00566602  0.01484657 -0.3816
## religpew3         -0.03330563  0.03343571 -0.9961
## religpew4          0.03509165  0.08228843  0.4264
## religpew5         -0.04032730  0.02821039 -1.4295
## religpew6         -0.02942079  0.01441983 -2.0403
## religpew7          0.00891140  0.05673882  0.1571
## religpew8         -0.07258307  0.03009301 -2.4120
## religpew9         -0.01017195  0.02049395 -0.4963
## religpew10        -0.02023446  0.01853818 -1.0915
## religpew11        -0.01855554  0.01356569 -1.3678
## religpew12         0.03736997  0.02630409  1.4207
## partyid3_namesIndependent 0.07063659  0.01565064  4.5133
## partyid3_namesNot Sure 0.01109633  0.00751058  1.4774
## partyid3_namesOther 0.02872999  0.01079072  2.6625
## partyid3_namesRepublican 0.09598298  0.02117043  4.5338
## ethnocentric1      0.01132530  0.00560884  2.0192
## wave              0.00507409  0.00709368  0.7153
## Empathy:sex        0.00293102  0.00790426  0.3708
## Empathy:birthyr    0.00407951  0.00699749  0.5830
## Empathy:immigrant2 -0.00850067  0.01621885 -0.5241
## Empathy:educ       -0.00209481  0.00822777 -0.2546
## Empathy:religpew2  -0.02195930  0.02176901 -1.0087
## Empathy:religpew3  -0.01393307  0.05449758 -0.2557
## Empathy:religpew4  -0.05096578  0.10699607 -0.4763
## Empathy:religpew5   0.00833015  0.04173160  0.1996
## Empathy:religpew6  -0.03608365  0.02375006 -1.5193
## Empathy:religpew7  -0.02735358  0.08419927 -0.3249
## Empathy:religpew8   0.04242311  0.03416375  1.2418
## Empathy:religpew9  -0.02435202  0.02663104 -0.9144
## Empathy:religpew10 -0.02358018  0.02484581 -0.9491
## Empathy:religpew11  0.01417370  0.02132122  0.6648
```

## Empathy:religpew12	-0.04468338	0.03643511	-1.2264
## Empathy:partyid3_namesIndependent	-0.01985414	0.02140529	-0.9275
## Empathy:partyid3_namesNot Sure	0.02775852	0.02690570	1.0317
## Empathy:partyid3_namesOther	-0.03705905	0.02614591	-1.4174
## Empathy:partyid3_namesRepublican	-0.00203085	0.03091827	-0.0657
## Empathy:ethnocentric1	-0.00063382	0.00777497	-0.0815
## Empathy:wave	0.00650277	0.01244640	0.5225
## partyid3_namesIndependent:wave	-0.02198475	0.02261519	-0.9721
## partyid3_namesNot Sure:wave	-0.00469432	0.00951141	-0.4935
## partyid3_namesOther:wave	0.03605479	0.08312414	0.4337
## partyid3_namesRepublican:wave	-0.05267608	0.02728345	-1.9307
## Empathy:partyid3_namesIndependent:wave	0.03516820	0.03306385	1.0636
## Empathy:partyid3_namesNot Sure:wave	-0.03080101	0.03361726	-0.9162
## Empathy:partyid3_namesOther:wave	0.02518945	0.11645203	0.2163
## Empathy:partyid3_namesRepublican:wave	0.00382047	0.03992784	0.0957
##	Pr(> t )		
## (Intercept)	0.0974879	.	
## Empathy	0.2588326		
## sex	0.0002351	***	
## birthyr	0.0002810	***	
## immigrant2	0.5686716		
## educ	0.2340618		
## religpew2	0.7027527		
## religpew3	0.3192649		
## religpew4	0.6698080		
## religpew5	0.1529431		
## religpew6	0.0413943	*	
## religpew7	0.8752065		
## religpew8	0.0159176	*	
## religpew9	0.6196858		
## religpew10	0.2751261		
## religpew11	0.1714523		
## religpew12	0.1554946		
## partyid3_namesIndependent	6.589e-06	***	
## partyid3_namesNot Sure	0.1396501		
## partyid3_namesOther	0.0077919	**	
## partyid3_namesRepublican	5.984e-06	***	
## ethnocentric1	0.0435426	*	
## wave	0.4744720		
## Empathy:sex	0.7107974		
## Empathy:birthyr	0.5599330		
## Empathy:immigrant2	0.6002257		
## Empathy:educ	0.7990450		
## Empathy:religpew2	0.3131675		
## Empathy:religpew3	0.7982252		
## Empathy:religpew4	0.6338663		
## Empathy:religpew5	0.8417951		
## Empathy:religpew6	0.1287741		
## Empathy:religpew7	0.7453007		
## Empathy:religpew8	0.2144080		
## Empathy:religpew9	0.3605571		
## Empathy:religpew10	0.3426545		
## Empathy:religpew11	0.5062412		
## Empathy:religpew12	0.2201362		
## Empathy:partyid3_namesIndependent	0.3537123		
## Empathy:partyid3_namesNot Sure	0.3022846		
## Empathy:partyid3_namesOther	0.1564556		

```

## Empathy:partyid3_namesRepublican      0.9476327
## Empathy:ethnocentric1                 0.9350321
## Empathy:wave                          0.6013811
## partyid3_namesIndependent:wave        0.3310554
## partyid3_namesNot Sure:wave           0.6216572
## partyid3_namesOther:wave              0.6644991
## partyid3_namesRepublican:wave         0.0536001
## Empathy:partyid3_namesIndependent:wave 0.2875619
## Empathy:partyid3_namesNot Sure:wave    0.3596106
## Empathy:partyid3_namesOther:wave       0.8287605
## Empathy:partyid3_namesRepublican:wave  0.9237766
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

#Persuasion
back8<- lm(survey_neg ~ Persuasion + sex + Persuasion*sex + birthyr + Persuasion*birthyr + immigrant2 + Persuasion*immigrant2)
clx(back8)

##
## t test of coefficients:
##
##              Estimate Std. Error t value
## (Intercept)      0.0185481  0.0111898  1.6576
## Persuasion       -0.0183579  0.0160642 -1.1428
## sex              0.0192223  0.0052210  3.6818
## birthyr         -0.0179375  0.0049335 -3.6358
## immigrant2       -0.0061753  0.0108327 -0.5701
## educ            0.0069438  0.0058343  1.1902
## religpew2       -0.0056660  0.0148466 -0.3816
## religpew3       -0.0333056  0.0334357 -0.9961
## religpew4        0.0350917  0.0822884  0.4264
## religpew5       -0.0403273  0.0282104 -1.4295
## religpew6       -0.0294208  0.0144198 -2.0403
## religpew7        0.0089114  0.0567388  0.1571
## religpew8       -0.0725831  0.0300930 -2.4120
## religpew9       -0.0101720  0.0204940 -0.4963
## religpew10      -0.0202345  0.0185382 -1.0915
## religpew11      -0.0185555  0.0135657 -1.3678
## religpew12       0.0373700  0.0263041  1.4207
## partyid3_namesIndependent      0.0706366  0.0156506  4.5133
## partyid3_namesNot Sure         0.0110963  0.0075106  1.4774
## partyid3_namesOther            0.0287300  0.0107907  2.6625
## partyid3_namesRepublican       0.0959830  0.0211704  4.5338
## ethnocentric1      0.0113253  0.0056088  2.0192
## wave                0.0050741  0.0070937  0.7153
## Persuasion:sex        0.0004118  0.0074130  0.0556
## Persuasion:birthyr    -0.0071048  0.0070805 -1.0034
## Persuasion:immigrant2  0.0080127  0.0151878  0.5276
## Persuasion:educ      -0.0023452  0.0078924 -0.2971
## Persuasion:religpew2  0.0320868  0.0216728  1.4805
## Persuasion:religpew3  0.1243397  0.0778883  1.5964
## Persuasion:religpew4 -0.0070645  0.1123947 -0.0629
## Persuasion:religpew5  0.1002474  0.0521577  1.9220
## Persuasion:religpew6 -0.0071104  0.0242514 -0.2932
## Persuasion:religpew7 -0.0056989  0.0723745 -0.0787
## Persuasion:religpew8  0.0953424  0.0365623  2.6077
## Persuasion:religpew9 -0.0128209  0.0254245 -0.5043
## Persuasion:religpew10 0.0508122  0.0315012  1.6130

```



## Persuasion:religpew11	0.0188734	0.0185336	1.0183
## Persuasion:religpew12	-0.0419050	0.0308137	-1.3599
## Persuasion:partyid3_namesIndependent	-0.0329771	0.0208685	-1.5802
## Persuasion:partyid3_namesNot Sure	0.0464228	0.0289505	1.6035
## Persuasion:partyid3_namesOther	0.1357655	0.0914006	1.4854
## Persuasion:partyid3_namesRepublican	0.0626489	0.0332220	1.8858
## Persuasion:ethnocentric1	-0.0073734	0.0073177	-1.0076
## Persuasion:wave	0.0036123	0.0110610	0.3266
## partyid3_namesIndependent:wave	-0.0219848	0.0226152	-0.9721
## partyid3_namesNot Sure:wave	-0.0046943	0.0095114	-0.4935
## partyid3_namesOther:wave	0.0360548	0.0831241	0.4337
## partyid3_namesRepublican:wave	-0.0526761	0.0272835	-1.9307
## Persuasion:partyid3_namesIndependent:wave	0.0228974	0.0308290	0.7427
## Persuasion:partyid3_namesNot Sure:wave	-0.0481810	0.0303249	-1.5888
## Persuasion:partyid3_namesOther:wave	-0.1139795	0.1413456	-0.8064
## Persuasion:partyid3_namesRepublican:wave	-0.0967651	0.0400833	-2.4141
##	Pr(> t )		
## (Intercept)	0.0974879	.	
## Persuasion	0.2532054		
## sex	0.0002351	***	
## birthyr	0.0002810	***	
## immigrant2	0.5686716		
## educ	0.2340618		
## religpew2	0.7027527		
## religpew3	0.3192649		
## religpew4	0.6698080		
## religpew5	0.1529431		
## religpew6	0.0413943	*	
## religpew7	0.8752065		
## religpew8	0.0159176	*	
## religpew9	0.6196858		
## religpew10	0.2751261		
## religpew11	0.1714523		
## religpew12	0.1554946		
## partyid3_namesIndependent	6.589e-06	***	
## partyid3_namesNot Sure	0.1396501		
## partyid3_namesOther	0.0077919	**	
## partyid3_namesRepublican	5.984e-06	***	
## ethnocentric1	0.0435426	*	
## wave	0.4744720		
## Persuasion:sex	0.9557026		
## Persuasion:birthyr	0.3157183		
## Persuasion:immigrant2	0.5978251		
## Persuasion:educ	0.7663731		
## Persuasion:religpew2	0.1388259		
## Persuasion:religpew3	0.1104918		
## Persuasion:religpew4	0.9498861		
## Persuasion:religpew5	0.0546852	.	
## Persuasion:religpew6	0.7693912		
## Persuasion:religpew7	0.9372428		
## Persuasion:religpew8	0.0091543	**	
## Persuasion:religpew9	0.6140997		
## Persuasion:religpew10	0.1068279		
## Persuasion:religpew11	0.3085876		
## Persuasion:religpew12	0.1739328		
## Persuasion:partyid3_namesIndependent	0.1141431		
## Persuasion:partyid3_namesNot Sure	0.1089077		

```
## Persuasion:partyid3_namesOther 0.1375295
## Persuasion:partyid3_namesRepublican 0.0594086 .
## Persuasion:ethnocentric1 0.3137059
## Persuasion:wave 0.7440017
## partyid3_namesIndependent:wave 0.3310554
## partyid3_namesNot Sure:wave 0.6216572
## partyid3_namesOther:wave 0.6644991
## partyid3_namesRepublican:wave 0.0536001 .
## Persuasion:partyid3_namesIndependent:wave 0.4576974
## Persuasion:partyid3_namesNot Sure:wave 0.1121893
## Persuasion:partyid3_namesOther:wave 0.4200727
## Persuasion:partyid3_namesRepublican:wave 0.0158246 *
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

## Time effects: Further analysis into Wave 2

From H4a and H4b we know that the empathy and persuasion effects do not persist for Y6.

From H8a and H8b we know that the Empathy-muslim and Persuasion-muslim interaction effects do not persist for Y2. From H9a and H9b we know that the heterogeneous effect of empathy/persuasion with seeing Muslim refugee profiles on Y6 do not persist.

From H11a and H11b we know that the heterogeneous effect of the Empathy/persuasion treatments with seeing Muslim refugee profiles on Y4 do not persist.

For full look at Wave 2 on Y1, Y2, Y6 for Empathy and Persuasion treatment effects:

```
#Empathy
```

```
#Y1
```

```
te1<-lm(y1 ~Empathy+gender+Empathy*gender+birthyr1+Empathy*birthyr1+immigrant2+Empathy*immigrant2+educ1+Emp
clx(te1, cluster=ControlEmpathy.data.y1.w2$caseid)
```

```
##
## t test of coefficients:
##
##
```

	Estimate	Std. Error	t value
## (Intercept)	5.0000e-01	9.1878e-13	5.4420e+11
## Empathy	2.6264e-11	1.0866e-12	2.4172e+01
## gender	-2.1021e-14	9.3589e-15	-2.2461e+00
## birthyr1	8.1581e-15	4.7262e-16	1.7261e+01
## immigrant2	-1.2790e-14	1.0350e-14	-1.2358e+00
## educ1	-9.7666e-15	3.4148e-15	-2.8601e+00
## religpew2	-1.7588e-14	1.3177e-14	-1.3347e+00
## religpew3	2.1972e-14	4.3735e-14	5.0240e-01
## religpew4	-5.7219e-14	7.8239e-14	-7.3130e-01
## religpew5	-9.7318e-15	3.5472e-14	-2.7440e-01
## religpew6	-1.0052e-13	3.7939e-14	-2.6495e+00
## religpew7	-6.2494e-14	4.3266e-14	-1.4444e+00
## religpew8	-2.4309e-13	3.7238e-14	-6.5279e+00
## religpew9	-9.5526e-14	1.9670e-14	-4.8564e+00
## religpew10	-8.2454e-14	2.2779e-14	-3.6197e+00
## religpew11	-7.9921e-14	1.5003e-14	-5.3271e+00
## religpew12	-1.2418e-13	2.0395e-14	-6.0888e+00
## partyid3_namesIndependent	2.2316e-14	1.1409e-14	1.9560e+00
## partyid3_namesNot Sure	-8.5403e-14	2.0709e-14	-4.1240e+00
## partyid3_namesOther	4.3181e-15	2.9026e-14	1.4880e-01
## partyid3_namesRepublican	-7.9096e-15	1.2270e-14	-6.4460e-01

## ethnocentric2	-9.0230e-15	1.3427e-14	-6.7200e-01
## Empathy:gender	2.8385e-14	1.1060e-14	2.5665e+00
## Empathy:birthyr1	-1.3426e-14	5.5756e-16	-2.4079e+01
## Empathy:immigrant2	1.8712e-14	1.2212e-14	1.5322e+00
## Empathy:educ1	9.2904e-15	3.9365e-15	2.3600e+00
## Empathy:religpew2	2.1237e-14	1.5881e-14	1.3373e+00
## Empathy:religpew3	1.0600e-14	5.0016e-14	2.1190e-01
## Empathy:religpew4	2.9480e-14	8.1830e-14	3.6030e-01
## Empathy:religpew5	1.4273e-14	3.9580e-14	3.6060e-01
## Empathy:religpew6	2.1175e-13	4.0991e-14	5.1657e+00
## Empathy:religpew7	1.2063e-13	5.1696e-14	2.3335e+00
## Empathy:religpew8	1.6288e-13	3.8581e-14	4.2217e+00
## Empathy:religpew9	1.7093e-13	2.3700e-14	7.2123e+00
## Empathy:religpew10	1.2332e-13	2.6223e-14	4.7028e+00
## Empathy:religpew11	1.2083e-13	1.7201e-14	7.0245e+00
## Empathy:religpew12	1.6193e-13	2.3964e-14	6.7573e+00
## Empathy:partyid3_namesIndependent	-2.8244e-14	1.3505e-14	-2.0914e+00
## Empathy:partyid3_namesNot Sure	1.2255e-13	2.4123e-14	5.0800e+00
## Empathy:partyid3_namesOther	6.4986e-14	3.6513e-14	1.7798e+00
## Empathy:partyid3_namesRepublican	7.9018e-15	1.4601e-14	5.4120e-01
## Empathy:ethnocentric2	-1.2380e-15	1.5097e-14	-8.2000e-02
##	Pr(> t )		
## (Intercept)	< 2.2e-16	***	
## Empathy	< 2.2e-16	***	
## gender	0.0247177	*	
## birthyr1	< 2.2e-16	***	
## immigrant2	0.2165733		
## educ1	0.0042429	**	
## religpew2	0.1819980		
## religpew3	0.6154083		
## religpew4	0.4645910		
## religpew5	0.7838193		
## religpew6	0.0080728	**	
## religpew7	0.1486524		
## religpew8	6.970e-11	***	
## religpew9	1.212e-06	***	
## religpew10	0.0002962	***	
## religpew11	1.018e-07	***	
## religpew12	1.176e-09	***	
## partyid3_namesIndependent	0.0504924	.	
## partyid3_namesNot Sure	3.751e-05	***	
## partyid3_namesOther	0.8817385		
## partyid3_namesRepublican	0.5191767		
## ethnocentric2	0.5015815		
## Empathy:gender	0.0102862	*	
## Empathy:birthyr1	< 2.2e-16	***	
## Empathy:immigrant2	0.1254950		
## Empathy:educ1	0.0182905	*	
## Empathy:religpew2	0.1811611		
## Empathy:religpew3	0.8321603		
## Empathy:religpew4	0.7186579		
## Empathy:religpew5	0.7184037		
## Empathy:religpew6	2.439e-07	***	
## Empathy:religpew7	0.0196410	*	
## Empathy:religpew8	2.445e-05	***	
## Empathy:religpew9	5.872e-13	***	
## Empathy:religpew10	2.598e-06	***	

```
## Empathy:religpew11          2.278e-12 ***
## Empathy:religpew12          1.478e-11 ***
## Empathy:partyid3_namesIndependent 0.0365157 *
## Empathy:partyid3_namesNot Sure   3.837e-07 ***
## Empathy:partyid3_namesOther      0.0751342 .
## Empathy:partyid3_namesRepublican 0.5883940
## Empathy:ethnocentric2          0.9346440
```

```
## ---
```

```
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

There is an empathy effect in wave 2 on Y1: estimate is 2.6264e-11, pvalue=< 2.2e-16 \*\*\*.

```
#Y2
```

```
te2<-lm(y2 ~ Empathy+sex+Empathy*sex+birthyr+Empathy*birthyr+immigrant2+Empathy*immigrant2+educ+Empathy*educ
clx(te2, cluster=ControlEmpathy.data.y2.w2$caseid)
```

```
##
```

```
## t test of coefficients:
```

```
##
```

	Estimate	Std. Error	t value	Pr(> t )
## (Intercept)	5.045457	0.164058	30.7540	< 2.2e-16
## Empathy	0.030908	0.228952	0.1350	0.8926154
## sex	-0.049447	0.056595	-0.8737	0.3822983
## birthyr	0.028943	0.061647	0.4695	0.6387242
## immigrant2	-0.164587	0.124681	-1.3201	0.1868444
## educ	0.161053	0.055879	2.8822	0.0039573
## religpew2	-0.104880	0.163227	-0.6425	0.5205365
## religpew3	0.087525	0.397858	0.2200	0.8258832
## religpew4	0.165673	0.649994	0.2549	0.7988179
## religpew5	0.099962	0.424857	0.2353	0.8139921
## religpew6	1.968089	0.420888	4.6760	2.960e-06
## religpew7	0.320838	0.667187	0.4809	0.6306106
## religpew8	1.011767	0.207443	4.8773	1.091e-06
## religpew9	0.782839	0.232702	3.3641	0.0007705
## religpew10	0.518597	0.247770	2.0931	0.0363671
## religpew11	0.246366	0.164358	1.4990	0.1339126
## religpew12	0.314941	0.233476	1.3489	0.1773904
## partyid3_namesIndependent	-0.937746	0.136996	-6.8451	8.061e-12
## partyid3_namesNot Sure	-1.082027	0.262975	-4.1146	3.908e-05
## partyid3_namesOther	-1.274383	0.499709	-2.5502	0.0107784
## partyid3_namesRepublican	-1.342462	0.153826	-8.7272	< 2.2e-16
## ethnocentric1	-0.479541	0.078314	-6.1233	9.483e-10
## Empathy:sex	0.081845	0.081092	1.0093	0.3128594
## Empathy:birthyr	0.127085	0.085450	1.4873	0.1369774
## Empathy:immigrant2	-0.038587	0.176524	-0.2186	0.8269730
## Empathy:educ	-0.062496	0.082215	-0.7602	0.4471783
## Empathy:religpew2	0.265119	0.231212	1.1466	0.2515530
## Empathy:religpew3	0.680375	0.546563	1.2448	0.2132235
## Empathy:religpew4	-0.685538	0.935741	-0.7326	0.4638094
## Empathy:religpew5	-0.235322	0.590760	-0.3983	0.6903886
## Empathy:religpew6	-1.524831	0.846311	-1.8017	0.0716144
## Empathy:religpew7	0.409956	0.826183	0.4962	0.6197597
## Empathy:religpew8	0.712815	0.273690	2.6045	0.0092145
## Empathy:religpew9	-0.016619	0.338872	-0.0490	0.9608860
## Empathy:religpew10	0.045947	0.339285	0.1354	0.8922792
## Empathy:religpew11	-0.382367	0.233663	-1.6364	0.1017847
## Empathy:religpew12	-0.292335	0.352188	-0.8301	0.4065266
## Empathy:partyid3_namesIndependent	0.018062	0.195068	0.0926	0.9262302

```

## Empathy:partyid3_namesNot Sure      0.073297    0.358939    0.2042    0.8381973
## Empathy:partyid3_namesOther          0.385216    0.740152    0.5205    0.6027569
## Empathy:partyid3_namesRepublican     0.217015    0.213844    1.0148    0.3102105
## Empathy:ethnocentric1                0.064725    0.102545    0.6312    0.5279349
##
## (Intercept)                          ***
## Empathy
## sex
## birthyr
## immigrant2
## educ                                  **
## religpew2
## religpew3
## religpew4
## religpew5
## religpew6                            ***
## religpew7
## religpew8                            ***
## religpew9                            ***
## religpew10                           *
## religpew11
## religpew12
## partyid3_namesIndependent            ***
## partyid3_namesNot Sure               ***
## partyid3_namesOther                  *
## partyid3_namesRepublican             ***
## ethnocentric1                       ***
## Empathy:sex
## Empathy:birthyr
## Empathy:immigrant2
## Empathy:educ
## Empathy:religpew2
## Empathy:religpew3
## Empathy:religpew4
## Empathy:religpew5
## Empathy:religpew6                    .
## Empathy:religpew7
## Empathy:religpew8                    **
## Empathy:religpew9
## Empathy:religpew10
## Empathy:religpew11
## Empathy:religpew12
## Empathy:partyid3_namesIndependent
## Empathy:partyid3_namesNot Sure
## Empathy:partyid3_namesOther
## Empathy:partyid3_namesRepublican
## Empathy:ethnocentric1
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

No empathy effect in wave 2 on Y2.

```
#Y6
```

```
te3<-lm(Y6_new ~ Empathy+sex+Empathy*sex+birthyr+Empathy*birthyr+immigrant2+Empathy*immigrant2+educ+Empathy
clx(te3))
```

```
##
```

```
## t test of coefficients:
```

```

##
##               Estimate Std. Error t value Pr(>|t|)
## (Intercept)      0.3326983  0.0390750  8.5144 < 2.2e-16
## Empathy          -0.0089769  0.0550976 -0.1629 0.8705948
## sex              0.0036990  0.0127017  0.2912 0.7709191
## birthyr         -0.0354723  0.0138456 -2.5620 0.0104902
## immigrant2       -0.0686091  0.0286277 -2.3966 0.0166520
## educ             0.0466825  0.0142151  3.2840 0.0010435
## religpew2        -0.0297784  0.0329817 -0.9029 0.3667139
## religpew3        -0.0636886  0.0806880 -0.7893 0.4300321
## religpew4        -0.1424438  0.0987306 -1.4428 0.1492683
## religpew5         0.0547985  0.1228704  0.4460 0.6556622
## religpew6         0.3224555  0.1473996  2.1876 0.0288280
## religpew7         0.4753436  0.1251774  3.7974 0.0001512
## religpew8         0.0631238  0.0658974  0.9579 0.3382390
## religpew9         0.1853630  0.0662924  2.7961 0.0052279
## religpew10        0.1381290  0.0714907  1.9321 0.0535045
## religpew11        0.0116470  0.0366701  0.3176 0.7508136
## religpew12        0.0631388  0.0520572  1.2129 0.2253412
## partyid3_namesIndependent -0.1511029  0.0331549 -4.5575 5.534e-06
## partyid3_namesNot Sure   -0.1804924  0.0500609 -3.6055 0.0003203
## partyid3_namesOther      0.0799922  0.1438097  0.5562 0.5781198
## partyid3_namesRepublican -0.2294869  0.0317122 -7.2365 6.845e-13
## ethnocentric1          -0.0778801  0.0135606 -5.7431 1.093e-08
## Empathy:sex            0.0052406  0.0181950  0.2880 0.7733619
## Empathy:birthyr        0.0326670  0.0195862  1.6679 0.0955227
## Empathy:immigrant2      0.0557557  0.0407032  1.3698 0.1709209
## Empathy:educ           0.0010039  0.0196137  0.0512 0.9591847
## Empathy:religpew2       0.0280379  0.0489744  0.5725 0.5670563
## Empathy:religpew3       0.0574264  0.1336326  0.4297 0.6674420
## Empathy:religpew4       0.3309489  0.1807748  1.8307 0.0673109
## Empathy:religpew5      -0.0576801  0.1487874 -0.3877 0.6983088
## Empathy:religpew6      -0.2701413  0.2302091 -1.1735 0.2407701
## Empathy:religpew7      -0.2589520  0.2283237 -1.1341 0.2568888
## Empathy:religpew8      -0.3068306  0.0779309 -3.9372 8.565e-05
## Empathy:religpew9      -0.1171954  0.0945729 -1.2392 0.2154341
## Empathy:religpew10     -0.1027987  0.0957478 -1.0736 0.2831312
## Empathy:religpew11     -0.0517305  0.0494478 -1.0462 0.2956291
## Empathy:religpew12     -0.0070189  0.0798187 -0.0879 0.9299376
## Empathy:partyid3_namesIndependent 0.0424649  0.0482499  0.8801 0.3789234
## Empathy:partyid3_namesNot Sure   -0.0683641  0.0643516 -1.0624 0.2882213
## Empathy:partyid3_namesOther      -0.1270521  0.1922708 -0.6608 0.5088286
## Empathy:partyid3_namesRepublican -0.0093893  0.0443512 -0.2117 0.8323628
## Empathy:ethnocentric1          -0.0039594  0.0196624 -0.2014 0.8404343
##
## (Intercept)          ***
## Empathy
## sex
## birthyr              *
## immigrant2           *
## educ                 **
## religpew2
## religpew3
## religpew4
## religpew5
## religpew6            *
## religpew7            ***

```

```
## religpew8
## religpew9 **
## religpew10 .
## religpew11
## religpew12
## partyid3_namesIndependent ***
## partyid3_namesNot Sure ***
## partyid3_namesOther
## partyid3_namesRepublican ***
## ethnocentric1 ***
## Empathy:sex
## Empathy:birthyr .
## Empathy:immigrant2
## Empathy:educ
## Empathy:religpew2
## Empathy:religpew3
## Empathy:religpew4 .
## Empathy:religpew5
## Empathy:religpew6
## Empathy:religpew7
## Empathy:religpew8 ***
## Empathy:religpew9
## Empathy:religpew10
## Empathy:religpew11
## Empathy:religpew12
## Empathy:partyid3_namesIndependent
## Empathy:partyid3_namesNot Sure
## Empathy:partyid3_namesOther
## Empathy:partyid3_namesRepublican
## Empathy:ethnocentric1
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

No empathy effect in wave 2 on Y6.

```
#Persuasion
```

```
#Y1
```

```
pe1<-lm(y1 ~ Persuasion+gender+Persuasion*gender+birthyr1+Persuasion*birthyr1+immigrant2+Persuasion*immigrant2)
clx(pe1, cluster=ControlPersuasion.data.y1.w2$caseid)
```

```
##
## t test of coefficients:
##
##
```

	Estimate	Std. Error	t value
## (Intercept)	5.0000e-01	1.3886e-13	3.6009e+12
## Persuasion	-2.9640e-12	3.2366e-13	-9.1577e+00
## gender	-8.0893e-15	1.5337e-15	-5.2745e+00
## birthyr1	1.1656e-15	7.2409e-17	1.6098e+01
## immigrant2	-3.1451e-15	1.6259e-15	-1.9343e+00
## educ1	-2.2028e-15	5.5537e-16	-3.9665e+00
## religpew2	-2.9947e-15	2.1276e-15	-1.4076e+00
## religpew3	5.3306e-15	7.5625e-15	7.0490e-01
## religpew4	6.4036e-15	8.2036e-15	7.8060e-01
## religpew5	-7.0086e-15	6.2634e-15	-1.1190e+00
## religpew6	-1.2379e-14	7.6017e-15	-1.6284e+00
## religpew7	-1.5266e-14	5.2662e-15	-2.8989e+00
## religpew8	-2.6332e-14	4.7481e-15	-5.5458e+00
## religpew9	-1.7937e-14	3.1687e-15	-5.6607e+00

## religpew10	-1.7644e-14	3.5418e-15	-4.9816e+00
## religpew11	-1.3290e-14	2.3964e-15	-5.5458e+00
## religpew12	-2.0004e-14	3.2596e-15	-6.1370e+00
## partyid3_namesIndependent	2.2356e-15	1.8274e-15	1.2234e+00
## partyid3_namesNot Sure	-1.5563e-14	3.3707e-15	-4.6170e+00
## partyid3_namesOther	2.5920e-15	6.1291e-15	4.2290e-01
## partyid3_namesRepublican	-1.1785e-15	1.9786e-15	-5.9560e-01
## ethnocentric2	-2.4393e-14	3.1382e-15	-7.7728e+00
## Persuasion:gender	1.3762e-15	3.5500e-15	3.8770e-01
## Persuasion:birthyr1	1.4957e-15	1.6670e-16	8.9722e+00
## Persuasion:immigrant2	-4.0034e-15	3.8304e-15	-1.0452e+00
## Persuasion:educ1	-6.9971e-16	1.2669e-15	-5.5230e-01
## Persuasion:religpew2	-6.7164e-15	5.0826e-15	-1.3215e+00
## Persuasion:religpew3	-2.6802e-14	1.4381e-14	-1.8637e+00
## Persuasion:religpew4	-3.4505e-14	2.6494e-14	-1.3024e+00
## Persuasion:religpew5	1.3472e-14	1.1653e-14	1.1561e+00
## Persuasion:religpew6	-4.5079e-14	1.9376e-14	-2.3265e+00
## Persuasion:religpew7	-4.6202e-15	1.8079e-14	-2.5560e-01
## Persuasion:religpew8	-5.2238e-14	9.1099e-15	-5.7342e+00
## Persuasion:religpew9	-1.1873e-14	7.4097e-15	-1.6023e+00
## Persuasion:religpew10	-6.3139e-15	8.0811e-15	-7.8130e-01
## Persuasion:religpew11	-1.5455e-14	5.4120e-15	-2.8557e+00
## Persuasion:religpew12	1.9401e-18	6.9236e-15	3.0000e-04
## Persuasion:partyid3_namesIndependent	4.5409e-15	4.2512e-15	1.0681e+00
## Persuasion:partyid3_namesNot Sure	4.1010e-15	7.4261e-15	5.5220e-01
## Persuasion:partyid3_namesOther	-6.8510e-15	1.2140e-14	-5.6430e-01
## Persuasion:partyid3_namesRepublican	4.9811e-15	4.4524e-15	1.1187e+00
## Persuasion:ethnocentric2	2.4593e-14	4.9467e-15	4.9716e+00
##	Pr(> t )		
## (Intercept)	< 2.2e-16	***	
## Persuasion	< 2.2e-16	***	
## gender	1.357e-07	***	
## birthyr1	< 2.2e-16	***	
## immigrant2	0.053097	.	
## educ1	7.342e-05	***	
## religpew2	0.159288		
## religpew3	0.480903		
## religpew4	0.435064		
## religpew5	0.263179		
## religpew6	0.103459		
## religpew7	0.003752	**	
## religpew8	2.996e-08	***	
## religpew9	1.546e-08	***	
## religpew10	6.403e-07	***	
## religpew11	2.995e-08	***	
## religpew12	8.704e-10	***	
## partyid3_namesIndependent	0.221208		
## partyid3_namesNot Sure	3.939e-06	***	
## partyid3_namesOther	0.672378		
## partyid3_namesRepublican	0.551432		
## ethnocentric2	8.378e-15	***	
## Persuasion:gender	0.698279		
## Persuasion:birthyr1	< 2.2e-16	***	
## Persuasion:immigrant2	0.295969		
## Persuasion:educ1	0.580750		
## Persuasion:religpew2	0.186374		
## Persuasion:religpew3	0.062396	.	



```
## Persuasion:religpew4          0.192821
## Persuasion:religpew5          0.247683
## Persuasion:religpew6          0.020013 *
## Persuasion:religpew7          0.798297
## Persuasion:religpew8          1.006e-08 ***
## Persuasion:religpew9          0.109108
## Persuasion:religpew10         0.434634
## Persuasion:religpew11         0.004303 **
## Persuasion:religpew12         0.999776
## Persuasion:partyid3_namesIndependent 0.285484
## Persuasion:partyid3_namesNot Sure 0.580796
## Persuasion:partyid3_namesOther 0.572536
## Persuasion:partyid3_namesRepublican 0.263280
## Persuasion:ethnocentric2      6.743e-07 ***
```

```
## ---
```

```
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

There is a negative statistically significant effect of persuasion on Y1 in wave 2: estimate -2.9640e-12, pvalue=< 2.2e-16 \*\*\*.

```
#Y2
```

```
pe2<-lm(y2 ~ Persuasion+sex+Persuasion*sex+birthyr+Persuasion*birthyr+immigrant2+Persuasion*immigrant2+educ
clx(pe2, cluster=ControlPersuasion.data.y2.w2$caseid)
```

```
##
```

```
## t test of coefficients:
```

```
##
```

	Estimate	Std. Error	t value
## (Intercept)	5.045457	0.164058	30.7540
## Persuasion	0.185213	0.220435	0.8402
## sex	-0.049447	0.056595	-0.8737
## birthyr	0.028943	0.061647	0.4695
## immigrant2	-0.164587	0.124681	-1.3201
## educ	0.161053	0.055879	2.8822
## religpew2	-0.104880	0.163227	-0.6425
## religpew3	0.087525	0.397858	0.2200
## religpew4	0.165673	0.649994	0.2549
## religpew5	0.099962	0.424857	0.2353
## religpew6	1.968089	0.420888	4.6760
## religpew7	0.320838	0.667187	0.4809
## religpew8	1.011767	0.207443	4.8773
## religpew9	0.782839	0.232702	3.3641
## religpew10	0.518597	0.247770	2.0931
## religpew11	0.246366	0.164358	1.4990
## religpew12	0.314941	0.233476	1.3489
## partyid3_namesIndependent	-0.937746	0.136996	-6.8451
## partyid3_namesNot Sure	-1.082027	0.262975	-4.1146
## partyid3_namesOther	-1.274383	0.499709	-2.5502
## partyid3_namesRepublican	-1.342462	0.153826	-8.7272
## ethnocentric1	-0.479541	0.078314	-6.1233
## Persuasion:sex	-0.092440	0.081802	-1.1300
## Persuasion:birthyr	0.268419	0.085007	3.1576
## Persuasion:immigrant2	-0.167993	0.173828	-0.9664
## Persuasion:educ	-0.055023	0.079291	-0.6939
## Persuasion:religpew2	0.142997	0.230626	0.6200
## Persuasion:religpew3	0.134245	0.478865	0.2803
## Persuasion:religpew4	0.861742	0.941272	0.9155
## Persuasion:religpew5	-0.111342	0.566890	-0.1964

```

## Persuasion:religpew6          -0.408074    0.546288 -0.7470
## Persuasion:religpew7           0.034162    0.843516  0.0405
## Persuasion:religpew8           0.346503    0.319459  1.0847
## Persuasion:religpew9          -0.503723    0.357230 -1.4101
## Persuasion:religpew10         -0.317253    0.336215 -0.9436
## Persuasion:religpew11         -0.322185    0.239533 -1.3451
## Persuasion:religpew12         -0.522985    0.360616 -1.4503
## Persuasion:partyid3_namesIndependent  0.183304    0.197208  0.9295
## Persuasion:partyid3_namesNot Sure   0.115317    0.376883  0.3060
## Persuasion:partyid3_namesOther     0.414627    0.672330  0.6167
## Persuasion:partyid3_namesRepublican  0.090928    0.212155  0.4286
## Persuasion:ethnocentric1         0.071998    0.101003  0.7128
##                                Pr(>|t|)
## (Intercept)                    < 2.2e-16 ***
## Persuasion                      0.4008051
## sex                             0.3822983
## birthyr                        0.6387242
## immigrant2                     0.1868444
## educ                           0.0039573 **
## religpew2                      0.5205365
## religpew3                      0.8258832
## religpew4                      0.7988179
## religpew5                      0.8139921
## religpew6                      2.960e-06 ***
## religpew7                      0.6306106
## religpew8                      1.091e-06 ***
## religpew9                      0.0007705 ***
## religpew10                    0.0363671 *
## religpew11                    0.1339126
## religpew12                    0.1773904
## partyid3_namesIndependent      8.061e-12 ***
## partyid3_namesNot Sure        3.908e-05 ***
## partyid3_namesOther           0.0107784 *
## partyid3_namesRepublican      < 2.2e-16 ***
## ethnocentric1                 9.483e-10 ***
## Persuasion:sex                 0.2584842
## Persuasion:birthyr            0.0015951 **
## Persuasion:immigrant2         0.3338485
## Persuasion:educ               0.4877356
## Persuasion:religpew2          0.5352447
## Persuasion:religpew3          0.7792221
## Persuasion:religpew4          0.3599455
## Persuasion:religpew5          0.8442942
## Persuasion:religpew6          0.4550836
## Persuasion:religpew7          0.9676955
## Persuasion:religpew8          0.2780979
## Persuasion:religpew9          0.1585457
## Persuasion:religpew10         0.3453942
## Persuasion:religpew11         0.1786363
## Persuasion:religpew12         0.1470168
## Persuasion:partyid3_namesIndependent 0.3526534
## Persuasion:partyid3_namesNot Sure   0.7596286
## Persuasion:partyid3_namesOther     0.5374444
## Persuasion:partyid3_namesRepublican 0.6682298
## Persuasion:ethnocentric1         0.4759621
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

No statistically significant effect of persuasion on y2 in wave2.

*#Y6*

```
pe3<-lm(Y6_new ~ Persuasion+sex+Persuasion*sex+birthyr+Persuasion*birthyr+immigrant2+Persuasion*immigrant2+
clx(pe3)
```

```
##
```

```
## t test of coefficients:
```

```
##
```

	Estimate	Std. Error	t value	Pr(> t )
## (Intercept)	0.2938289	0.0186008	15.7965	< 2.2e-16 ***
## sex	0.0030702	0.0063150	0.4862	0.6268677
## birthyr	-0.0147648	0.0067403	-2.1905	0.0285491 *
## immigrant2	-0.0372159	0.0139436	-2.6690	0.0076415 **
## educ	0.0466556	0.0068609	6.8002	1.219e-11 ***
## religpew2	0.0043429	0.0173630	0.2501	0.8025055
## religpew3	0.0077895	0.0484834	0.1607	0.8723673
## religpew4	0.0110289	0.0635042	0.1737	0.8621331
## religpew5	0.0706203	0.0476170	1.4831	0.1381383
## religpew6	0.1184205	0.0787105	1.5045	0.1325393
## religpew7	0.2915672	0.0791092	3.6856	0.0002315 ***
## religpew8	0.0375459	0.1195756	0.3140	0.7535448
## religpew9	0.1394290	0.0331137	4.2106	2.609e-05 ***
## religpew10	0.0913202	0.0316021	2.8897	0.0038794 **
## religpew11	-0.0082175	0.0168878	-0.4866	0.6265770
## religpew12	0.0786464	0.0288368	2.7273	0.0064167 **
## partyid3_namesIndependent	-0.1036378	0.0166840	-6.2118	5.839e-10 ***
## partyid3_namesNot Sure	-0.1809280	0.0222893	-8.1173	6.492e-16 ***
## partyid3_namesOther	0.0290661	0.0858821	0.3384	0.7350499
## partyid3_namesRepublican	-0.2019256	0.0152419	-13.2480	< 2.2e-16 ***
## ethnocentric1	-0.0763197	0.0067539	-11.3001	< 2.2e-16 ***

```
## ---
```

```
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

No statistically significant effect of persuasion on y6 in wave2. Further visual analysis conducted in graphs/plots section. ### What happens in Wave 2 for HTE on Party?

```
##### Y6
```

*#H2a in Wave 2*

```
party.time1<-lm(Y6_new ~ Empathy+sex+Empathy*sex+birthyr+Empathy*birthyr+immigrant2+Empathy*immigrant2+educ
clx(party.time1)
```

```
##
```

```
## t test of coefficients:
```

```
##
```

	Estimate	Std. Error	t value
## (Intercept)	0.19653930	0.02920152	6.7304
## Empathy	0.14218984	0.04291502	3.3133
## sex	0.00718957	0.00869800	0.8266
## birthyr	-0.02761301	0.00928416	-2.9742
## immigrant2	-0.03484990	0.01941282	-1.7952
## educ	0.05692900	0.00973918	5.8454
## religpew2	0.02324919	0.02381181	0.9764
## religpew3	-0.01403404	0.05270783	-0.2663
## religpew4	-0.00450481	0.08524029	-0.0528
## religpew5	0.09404454	0.07244981	1.2981
## religpew6	0.22054774	0.11706857	1.8839
## religpew7	0.32509154	0.10596037	3.0680
## religpew8	0.02041898	0.05580588	0.3659

## religpew9	0.15842454	0.04577987	3.4606
## religpew10	0.13838420	0.04358282	3.1752
## religpew11	0.01861900	0.02357822	0.7897
## religpew12	0.09046311	0.03909681	2.3138
## partyid3_namesIndependent	-0.02410731	0.03126840	-0.7710
## partyid3_namesNot Sure	-0.07984311	0.03841810	-2.0783
## partyid3_namesOther	-0.21699120	0.06251275	-3.4712
## partyid3_namesRepublican	-0.12647020	0.02729531	-4.6334
## ethnocentric1	-0.06943635	0.00906093	-7.6633
## wave	0.10792022	0.03414463	3.1607
## Empathy:sex	-0.00697944	0.01266874	-0.5509
## Empathy:birthyr	0.02709228	0.01348142	2.0096
## Empathy:immigrant2	-0.00083072	0.02783832	-0.0298
## Empathy:educ	-0.01928910	0.01370085	-1.4079
## Empathy:religpew2	-0.03601946	0.03453491	-1.0430
## Empathy:religpew3	0.06078647	0.09940560	0.6115
## Empathy:religpew4	0.03064325	0.12561896	0.2439
## Empathy:religpew5	-0.04361020	0.09650222	-0.4519
## Empathy:religpew6	-0.21571750	0.15768982	-1.3680
## Empathy:religpew7	-0.08840232	0.15970318	-0.5535
## Empathy:religpew8	0.01131328	0.23393715	0.0484
## Empathy:religpew9	-0.03961934	0.06578937	-0.6022
## Empathy:religpew10	-0.09582419	0.06310956	-1.5184
## Empathy:religpew11	-0.05254890	0.03371415	-1.5587
## Empathy:religpew12	-0.01786613	0.05761778	-0.3101
## Empathy:partyid3_namesIndependent	-0.11218637	0.04560881	-2.4598
## Empathy:partyid3_namesNot Sure	-0.12353945	0.06264582	-1.9720
## Empathy:partyid3_namesOther	0.37125902	0.28662198	1.2953
## Empathy:partyid3_namesRepublican	-0.08418041	0.04159931	-2.0236
## Empathy:ethnocentric1	-0.01523424	0.01336995	-1.1394
## Empathy:wave	-0.11696276	0.04982998	-2.3472
## partyid3_namesIndependent:wave	-0.13195891	0.04539710	-2.9068
## partyid3_namesNot Sure:wave	-0.10413551	0.06000928	-1.7353
## partyid3_namesOther:wave	0.28345431	0.15624436	1.8142
## partyid3_namesRepublican:wave	-0.11466095	0.04074356	-2.8142
## Empathy:partyid3_namesIndependent:wave	0.16566871	0.06584514	2.5160
## Empathy:partyid3_namesNot Sure:wave	0.05469439	0.08730865	0.6264
## Empathy:partyid3_namesOther:wave	-0.46941558	0.34453410	-1.3625
## Empathy:partyid3_namesRepublican:wave	0.09599028	0.05956608	1.6115
##	Pr(> t )		
## (Intercept)	1.964e-11	***	
## Empathy	0.0009313	***	
## sex	0.4085322		
## birthyr	0.0029573	**	
## immigrant2	0.0727068	.	
## educ	5.511e-09	***	
## religpew2	0.3289466		
## religpew3	0.7900537		
## religpew4	0.9578557		
## religpew5	0.1943495		
## religpew6	0.0596576	.	
## religpew7	0.0021709	**	
## religpew8	0.7144667		
## religpew9	0.0005454	***	
## religpew10	0.0015102	**	
## religpew11	0.4297738		
## religpew12	0.0207343	*	

```
## partyid3_namesIndependent 0.4407702
## partyid3_namesNot Sure 0.0377564 *
## partyid3_namesOther 0.0005244 ***
## partyid3_namesRepublican 3.726e-06 ***
## ethnocentric1 2.324e-14 ***
## wave 0.0015873 **
## Empathy:sex 0.5817245
## Empathy:birthyr 0.0445489 *
## Empathy:immigrant2 0.9761956
## Empathy:educ 0.1592553
## Empathy:religpew2 0.2970255
## Empathy:religpew3 0.5409082
## Empathy:religpew4 0.8072929
## Empathy:religpew5 0.6513623
## Empathy:religpew6 0.1714030
## Empathy:religpew7 0.5799276
## Empathy:religpew8 0.9614318
## Empathy:religpew9 0.5470696
## Empathy:religpew10 0.1290082
## Empathy:religpew11 0.1191660
## Empathy:religpew12 0.7565182
## Empathy:partyid3_namesIndependent 0.0139507 *
## Empathy:partyid3_namesNot Sure 0.0486837 *
## Empathy:partyid3_namesOther 0.1953040
## Empathy:partyid3_namesRepublican 0.0430860 *
## Empathy:ethnocentric1 0.2545970
## Empathy:wave 0.0189679 *
## partyid3_namesIndependent:wave 0.0036744 **
## partyid3_namesNot Sure:wave 0.0827704 .
## partyid3_namesOther:wave 0.0697355 .
## partyid3_namesRepublican:wave 0.0049167 **
## Empathy:partyid3_namesIndependent:wave 0.0119121 *
## Empathy:partyid3_namesNot Sure:wave 0.5310610
## Empathy:partyid3_namesOther:wave 0.1731377
## Empathy:partyid3_namesRepublican:wave 0.1071614
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

*#H2b in Wave 2*

```
party.time2 <- lm( Y6_new ~ Persuasion + sex + Persuasion*sex + birthyr + Persuasion*birthyr + immigrant2 +
  clx(party.time2)
```

```
##
## t test of coefficients:
##
##               Estimate Std. Error t value
## (Intercept)    0.1965393  0.0292015  6.7304
## Persuasion      0.0363403  0.0408431  0.8898
## sex             0.0071896  0.0086980  0.8266
## birthyr        -0.0276130  0.0092842 -2.9742
## immigrant2     -0.0348499  0.0194128 -1.7952
## educ           0.0569290  0.0097392  5.8454
## religpew2       0.0232492  0.0238118  0.9764
## religpew3      -0.0140340  0.0527078 -0.2663
## religpew4      -0.0045048  0.0852403 -0.0528
## religpew5       0.0940445  0.0724498  1.2981
## religpew6       0.2205477  0.1170686  1.8839
## religpew7       0.3250915  0.1059604  3.0680
```

## religpew8	0.0204190	0.0558059	0.3659
## religpew9	0.1584245	0.0457799	3.4606
## religpew10	0.1383842	0.0435828	3.1752
## religpew11	0.0186190	0.0235782	0.7897
## religpew12	0.0904631	0.0390968	2.3138
## partyid3_namesIndependent	-0.0241073	0.0312684	-0.7710
## partyid3_namesNot Sure	-0.0798431	0.0384181	-2.0783
## partyid3_namesOther	-0.2169912	0.0625127	-3.4712
## partyid3_namesRepublican	-0.1264702	0.0272953	-4.6334
## ethnocentric1	-0.0694363	0.0090609	-7.6633
## wave	0.1079202	0.0341446	3.1607
## Persuasion:sex	-0.0076486	0.0124835	-0.6127
## Persuasion:birthyr	0.0317132	0.0131118	2.4187
## Persuasion:immigrant2	0.0265927	0.0274349	0.9693
## Persuasion:educ	-0.0125598	0.0136890	-0.9175
## Persuasion:religpew2	-0.0358468	0.0337218	-1.0630
## Persuasion:religpew3	0.0098603	0.1008529	0.0978
## Persuasion:religpew4	-0.0760294	0.1255959	-0.6053
## Persuasion:religpew5	-0.1405433	0.0900629	-1.5605
## Persuasion:religpew6	-0.1737135	0.1442251	-1.2045
## Persuasion:religpew7	-0.1295174	0.1433841	-0.9033
## Persuasion:religpew8	0.6658884	0.0648020	10.2757
## Persuasion:religpew9	-0.0483166	0.0651465	-0.7417
## Persuasion:religpew10	-0.0760473	0.0616150	-1.2342
## Persuasion:religpew11	-0.0292026	0.0340419	-0.8578
## Persuasion:religpew12	-0.0250223	0.0583861	-0.4286
## Persuasion:partyid3_namesIndependent	-0.0733839	0.0435056	-1.6868
## Persuasion:partyid3_namesNot Sure	-0.0540576	0.0582902	-0.9274
## Persuasion:partyid3_namesOther	0.1136859	0.1293787	0.8787
## Persuasion:partyid3_namesRepublican	-0.0228769	0.0392378	-0.5830
## Persuasion:ethnocentric1	-0.0046668	0.0128336	-0.3636
## Persuasion:wave	-0.0607592	0.0469876	-1.2931
## partyid3_namesIndependent:wave	-0.1319589	0.0453971	-2.9068
## partyid3_namesNot Sure:wave	-0.1041355	0.0600093	-1.7353
## partyid3_namesOther:wave	0.2834543	0.1562444	1.8142
## partyid3_namesRepublican:wave	-0.1146609	0.0407436	-2.8142
## Persuasion:partyid3_namesIndependent:wave	0.1646231	0.0641844	2.5648
## Persuasion:partyid3_namesNot Sure:wave	0.0820064	0.0895241	0.9160
## Persuasion:partyid3_namesOther:wave	-0.2933477	0.2074507	-1.4141
## Persuasion:partyid3_namesRepublican:wave	0.0764439	0.0572325	1.3357
##	Pr(> t )		
## (Intercept)	1.964e-11	***	
## Persuasion	0.3736591		
## sex	0.4085322		
## birthyr	0.0029573	**	
## immigrant2	0.0727068	.	
## educ	5.511e-09	***	
## religpew2	0.3289466		
## religpew3	0.7900537		
## religpew4	0.9578557		
## religpew5	0.1943495		
## religpew6	0.0596576	.	
## religpew7	0.0021709	**	
## religpew8	0.7144667		
## religpew9	0.0005454	***	
## religpew10	0.0015102	**	
## religpew11	0.4297738		

```
## religpew12 0.0207343 *
## partyid3_namesIndependent 0.4407702
## partyid3_namesNot Sure 0.0377564 *
## partyid3_namesOther 0.0005244 ***
## partyid3_namesRepublican 3.726e-06 ***
## ethnocentric1 2.324e-14 ***
## wave 0.0015873 **
## Persuasion:sex 0.5401142
## Persuasion:birthyr 0.0156273 *
## Persuasion:immigrant2 0.3324606
## Persuasion:educ 0.3589375
## Persuasion:religpew2 0.2878479
## Persuasion:religpew3 0.9221210
## Persuasion:religpew4 0.5449859
## Persuasion:religpew5 0.1187306
## Persuasion:religpew6 0.2284917
## Persuasion:religpew7 0.3664335
## Persuasion:religpew8 < 2.2e-16 ***
## Persuasion:religpew9 0.4583421
## Persuasion:religpew10 0.2171980
## Persuasion:religpew11 0.3910374
## Persuasion:religpew12 0.6682653
## Persuasion:partyid3_namesIndependent 0.0917359 .
## Persuasion:partyid3_namesNot Sure 0.3537888
## Persuasion:partyid3_namesOther 0.3796199
## Persuasion:partyid3_namesRepublican 0.5599087
## Persuasion:ethnocentric1 0.7161484
## Persuasion:wave 0.1960641
## partyid3_namesIndependent:wave 0.0036744 **
## partyid3_namesNot Sure:wave 0.0827704 .
## partyid3_namesOther:wave 0.0697355 .
## partyid3_namesRepublican:wave 0.0049167 **
## Persuasion:partyid3_namesIndependent:wave 0.0103630 *
## Persuasion:partyid3_namesNot Sure:wave 0.3597159
## Persuasion:partyid3_namesOther:wave 0.1574321
## Persuasion:partyid3_namesRepublican:wave 0.1817417
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
##### Y2
```

```
party.time3 <- lm(y2 ~ Empathy+sex+Empathy*sex+birthyr+Empathy*birthyr+immigrant2+Empathy*immigrant2+educ+
  clx(party.time3,ControlEmpathy.data.y2$caseid)
```

```
##
## t test of coefficients:
##
## Estimate Std. Error t value
## (Intercept) 5.2404027 0.1273951 41.1350
## Empathy -0.0320533 0.1763098 -0.1818
## sex -0.0136181 0.0398495 -0.3417
## birthyr 0.0466456 0.0410589 1.1361
## immigrant2 -0.2108386 0.0869093 -2.4260
## educ 0.1634263 0.0397580 4.1105
## religpew2 -0.1382737 0.1188306 -1.1636
## religpew3 0.0344380 0.2585399 0.1332
## religpew4 0.5287839 0.2980133 1.7744
## religpew5 0.2775059 0.2411772 1.1506
## religpew6 1.3709243 0.3991940 3.4342
```

## religpew7	0.3723120	0.4104714	0.9070
## religpew8	1.2156667	0.3778585	3.2173
## religpew9	0.5618166	0.1635120	3.4359
## religpew10	0.4722237	0.1633062	2.8916
## religpew11	0.1408488	0.1165882	1.2081
## religpew12	0.4577951	0.1685001	2.7169
## partyid3_namesIndependent	-0.8719613	0.1293329	-6.7420
## partyid3_namesNot Sure	-0.8120155	0.2401422	-3.3814
## partyid3_namesOther	0.6722100	0.4295618	1.5649
## partyid3_namesRepublican	-1.1067293	0.1450727	-7.6288
## ethnocentric1	-0.4013477	0.0541203	-7.4158
## wave	-0.0939051	0.1203300	-0.7804
## Empathy:sex	0.0323650	0.0566928	0.5709
## Empathy:birthyr	0.1427359	0.0577654	2.4710
## Empathy:immigrant2	0.0298774	0.1231204	0.2427
## Empathy:educ	-0.0283740	0.0572135	-0.4959
## Empathy:religpew2	0.2630471	0.1649799	1.5944
## Empathy:religpew3	0.4675623	0.4058765	1.1520
## Empathy:religpew4	-1.3437615	0.6104091	-2.2014
## Empathy:religpew5	-0.4139344	0.3669216	-1.1281
## Empathy:religpew6	-0.9804396	0.6802543	-1.4413
## Empathy:religpew7	0.5225507	0.4889867	1.0686
## Empathy:religpew8	-0.0291014	0.5199958	-0.0560
## Empathy:religpew9	-0.2156281	0.2378102	-0.9067
## Empathy:religpew10	-0.1349224	0.2299177	-0.5868
## Empathy:religpew11	-0.2990820	0.1652004	-1.8104
## Empathy:religpew12	-0.5113436	0.2433316	-2.1014
## Empathy:partyid3_namesIndependent	0.3479006	0.1814273	1.9176
## Empathy:partyid3_namesNot Sure	0.0894020	0.3488440	0.2563
## Empathy:partyid3_namesOther	-2.2333515	1.7814651	-1.2537
## Empathy:partyid3_namesRepublican	-0.0855415	0.2106574	-0.4061
## Empathy:ethnocentric1	0.0050858	0.0717840	0.0708
## Empathy:wave	0.0287197	0.1718747	0.1671
## partyid3_namesIndependent:wave	-0.0998165	0.1869498	-0.5339
## partyid3_namesNot Sure:wave	-0.3165067	0.3416312	-0.9265
## partyid3_namesOther:wave	-2.0175652	0.6577694	-3.0673
## partyid3_namesRepublican:wave	-0.2927065	0.1974116	-1.4827
## Empathy:partyid3_namesIndependent:wave	-0.3080484	0.2649479	-1.1627
## Empathy:partyid3_namesNot Sure:wave	0.0198579	0.4857468	0.0409
## Empathy:partyid3_namesOther:wave	2.6626573	1.9230227	1.3846
## Empathy:partyid3_namesRepublican:wave	0.3071568	0.2845265	1.0795
##	Pr(> t )		
## (Intercept)	< 2.2e-16 ***		
## Empathy	0.8557407		
## sex	0.7325506		
## birthyr	0.2559418		
## immigrant2	0.0152761 *		
## educ	3.962e-05 ***		
## religpew2	0.2445910		
## religpew3	0.8940350		
## religpew4	0.0760172 .		
## religpew5	0.2498969		
## religpew6	0.0005954 ***		
## religpew7	0.3643982		
## religpew8	0.0012962 **		
## religpew9	0.0005916 ***		
## religpew10	0.0038361 **		



```
## religpew11 0.2270267
## religpew12 0.0065952 **
## partyid3_namesIndependent 1.602e-11 ***
## partyid3_namesNot Sure 0.0007225 ***
## partyid3_namesOther 0.1176272
## partyid3_namesRepublican 2.468e-14 ***
## ethnocentric1 1.253e-13 ***
## wave 0.4351664
## Empathy:sex 0.5680849
## Empathy:birthyr 0.0134827 *
## Empathy:immigrant2 0.8082647
## Empathy:educ 0.6199475
## Empathy:religpew2 0.1108568
## Empathy:religpew3 0.2493414
## Empathy:religpew4 0.0277175 *
## Empathy:religpew5 0.2592786
## Empathy:religpew6 0.1495190
## Empathy:religpew7 0.2852440
## Empathy:religpew8 0.9553704
## Empathy:religpew9 0.3645632
## Empathy:religpew10 0.5573245
## Empathy:religpew11 0.0702446 .
## Empathy:religpew12 0.0356151 *
## Empathy:partyid3_namesIndependent 0.0551781 .
## Empathy:partyid3_namesNot Sure 0.7977365
## Empathy:partyid3_namesOther 0.2099792
## Empathy:partyid3_namesRepublican 0.6846957
## Empathy:ethnocentric1 0.9435192
## Empathy:wave 0.8672955
## partyid3_namesIndependent:wave 0.5934013
## partyid3_namesNot Sure:wave 0.3542188
## partyid3_namesOther:wave 0.0021628 **
## partyid3_namesRepublican:wave 0.1381629
## Empathy:partyid3_namesIndependent:wave 0.2449741
## Empathy:partyid3_namesNot Sure:wave 0.9673910
## Empathy:partyid3_namesOther:wave 0.1661828
## Empathy:partyid3_namesRepublican:wave 0.2803607
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
party.time4 <- lm(y2 ~ Persuasion+sex+Persuasion*sex+birthyr+Persuasion*birthyr+ immigrant2 + Persuasion*im
clx(party.time4,ControlPersuasion.data.y2$caseid)
```

```
##
## t test of coefficients:
##
## Estimate Std. Error t value
## (Intercept) 5.2404027 0.1273951 41.1350
## Persuasion 0.0367328 0.1764476 0.2082
## sex -0.0136181 0.0398495 -0.3417
## birthyr 0.0466456 0.0410589 1.1361
## immigrant2 -0.2108386 0.0869093 -2.4260
## educ 0.1634263 0.0397580 4.1105
## religpew2 -0.1382737 0.1188306 -1.1636
## religpew3 0.0344380 0.2585399 0.1332
## religpew4 0.5287839 0.2980133 1.7744
## religpew5 0.2775059 0.2411772 1.1506
## religpew6 1.3709243 0.3991940 3.4342
```

## religpew7	0.3723120	0.4104714	0.9070
## religpew8	1.2156667	0.3778585	3.2173
## religpew9	0.5618166	0.1635120	3.4359
## religpew10	0.4722237	0.1633062	2.8916
## religpew11	0.1408488	0.1165882	1.2081
## religpew12	0.4577951	0.1685001	2.7169
## partyid3_namesIndependent	-0.8719613	0.1293329	-6.7420
## partyid3_namesNot Sure	-0.8120155	0.2401422	-3.3814
## partyid3_namesOther	0.6722100	0.4295618	1.5649
## partyid3_namesRepublican	-1.1067293	0.1450727	-7.6288
## ethnocentric1	-0.4013477	0.0541203	-7.4158
## wave	-0.0939051	0.1203300	-0.7804
## Persuasion:sex	-0.0566074	0.0569587	-0.9938
## Persuasion:birthyr	0.2168055	0.0563632	3.8466
## Persuasion:immigrant2	-0.0404125	0.1219312	-0.3314
## Persuasion:educ	-0.0408076	0.0561752	-0.7264
## Persuasion:religpew2	0.2095000	0.1662258	1.2603
## Persuasion:religpew3	0.2521717	0.3491229	0.7223
## Persuasion:religpew4	0.2082334	0.5241938	0.3972
## Persuasion:religpew5	-0.3035329	0.3576916	-0.8486
## Persuasion:religpew6	-0.2068059	0.5509321	-0.3754
## Persuasion:religpew7	0.3270123	0.5022172	0.6511
## Persuasion:religpew8	0.3422710	0.4392485	0.7792
## Persuasion:religpew9	-0.1153709	0.2338467	-0.4934
## Persuasion:religpew10	-0.2163846	0.2310107	-0.9367
## Persuasion:religpew11	-0.2206977	0.1675622	-1.3171
## Persuasion:religpew12	-0.5387144	0.2618107	-2.0576
## Persuasion:partyid3_namesIndependent	0.0017266	0.1868963	0.0092
## Persuasion:partyid3_namesNot Sure	-0.0886627	0.3602757	-0.2461
## Persuasion:partyid3_namesOther	-1.7693241	0.6162063	-2.8713
## Persuasion:partyid3_namesRepublican	-0.2947065	0.2070842	-1.4231
## Persuasion:ethnocentric1	0.0360448	0.0725583	0.4968
## Persuasion:wave	-0.0074220	0.1682797	-0.0441
## partyid3_namesIndependent:wave	-0.0998165	0.1869498	-0.5339
## partyid3_namesNot Sure:wave	-0.3165067	0.3416312	-0.9265
## partyid3_namesOther:wave	-2.0175652	0.6577694	-3.0673
## partyid3_namesRepublican:wave	-0.2927065	0.1974116	-1.4827
## Persuasion:partyid3_namesIndependent:wave	0.1719694	0.2696465	0.6378
## Persuasion:partyid3_namesNot Sure:wave	0.2706335	0.5060271	0.5348
## Persuasion:partyid3_namesOther:wave	2.1634838	0.9077715	2.3833
## Persuasion:partyid3_namesRepublican:wave	0.4146381	0.2817911	1.4714
##	Pr(> t )		
## (Intercept)	< 2.2e-16 ***		
## Persuasion	0.8350907		
## sex	0.7325506		
## birthyr	0.2559418		
## immigrant2	0.0152761 *		
## educ	3.962e-05 ***		
## religpew2	0.2445910		
## religpew3	0.8940350		
## religpew4	0.0760172 .		
## religpew5	0.2498969		
## religpew6	0.0005954 ***		
## religpew7	0.3643982		
## religpew8	0.0012962 **		
## religpew9	0.0005916 ***		
## religpew10	0.0038361 **		

```

## religpew11                                0.2270267
## religpew12                                0.0065952 **
## partyid3_namesIndependent                 1.602e-11 ***
## partyid3_namesNot Sure                    0.0007225 ***
## partyid3_namesOther                      0.1176272
## partyid3_namesRepublican                  2.468e-14 ***
## ethnocentric1                            1.253e-13 ***
## wave                                      0.4351664
## Persuasion:sex                           0.3203164
## Persuasion:birthyr                       0.0001201 ***
## Persuasion:immigrant2                     0.7403174
## Persuasion:educ                           0.4675808
## Persuasion:religpew2                     0.2075628
## Persuasion:religpew3                     0.4701175
## Persuasion:religpew4                     0.6911907
## Persuasion:religpew5                     0.3961199
## Persuasion:religpew6                     0.7073856
## Persuasion:religpew7                     0.5149648
## Persuasion:religpew8                     0.4358589
## Persuasion:religpew9                     0.6217622
## Persuasion:religpew10                    0.3489303
## Persuasion:religpew11                    0.1878160
## Persuasion:religpew12                    0.0396359 *
## Persuasion:partyid3_namesIndependent      0.9926289
## Persuasion:partyid3_namesNot Sure         0.8056097
## Persuasion:partyid3_namesOther            0.0040916 **
## Persuasion:partyid3_namesRepublican       0.1547146
## Persuasion:ethnocentric1                  0.6193563
## Persuasion:wave                           0.9648210
## partyid3_namesIndependent:wave            0.5934013
## partyid3_namesNot Sure:wave               0.3542188
## partyid3_namesOther:wave                  0.0021628 **
## partyid3_namesRepublican:wave             0.1381629
## Persuasion:partyid3_namesIndependent:wave 0.5236377
## Persuasion:partyid3_namesNot Sure:wave    0.5927798
## Persuasion:partyid3_namesOther:wave       0.0171672 *
## Persuasion:partyid3_namesRepublican:wave  0.1411874
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```