

# Moderating Factors Moral Judgment: CCES 2012

*Jennifer Lin*

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## Introduction

In this section, I conduct analyses that include other demographic variables such as religion, gender, income and education on moral foundations using the CCES Duke 2012 team module. This section focuses on the Moral Judgment questions.

Before I begin, let's load in the data (available for download [here](#)) and relevant packages.

```
# Load Data
cces <- read.csv("~/Desktop/Working/Moral-Psychology/DukeCCES12/CCES-MFQ.csv")

library(tidyverse)
```

## Clean Data

I clean the data similar to the way that it was cleaned for the Moral Foundations analyses.

First, I filter out the people who did not pass the attention checks.

```
cces <- cces[!(cces$math == "4"), ]
cces <- cces[!(cces$math == "5"), ]
cces <- cces[!(cces$math == "6"), ]

cces <- cces[!(cces$dogood == "1"), ]
cces <- cces[!(cces$dogood == "3"), ]
```

Then, I create a score for each foundation that represents the average of the responses for each of the foundations in this subscale.

I also generate an aggregate individualizing and binding foundation subscale, as well as a difference score that represents the difference between the two scores.

```
### Harm ###
cces$compat <- cces$compat - 1
cces$hurt <- cces$hurt - 1
cces$kill <- cces$kill - 1
cces$Harm <- rowMeans(cces[, c("compat", "hurt", "kill")], na.rm = TRUE)

### Fairness ###
cces$treatf <- cces$treatf - 1
cces$justice <- cces$justice - 1
cces$rich <- cces$rich - 1
cces$Fairness <- rowMeans(cces[, c("treatf", "justice", "rich")],
  na.rm = TRUE)

### Ingroup ###
cces$proudc <- cces$proudc - 1
cces$loyalf <- cces$loyalf - 1
cces$team <- cces$team - 1
cces$Ingroup <- rowMeans(cces[, c("proudc", "loyalf", "team")],
  na.rm = TRUE)

### Authority ###
cces$authc <- cces$authc - 1
cces$roles <- cces$roles - 1
cces$obey <- cces$obey - 1
cces$Authority <- rowMeans(cces[, c("authc", "roles", "obey")],
  na.rm = TRUE)

### Purity ###
cces$nodisgust <- cces$nodisgust - 1
cces$notnat <- cces$notnat - 1
cces$chaste <- cces$chaste - 1
cces$Purity <- rowMeans(cces[, c("disgust", "notnat", "chaste")],
  na.rm = TRUE)

# Individualizing and Binding scores
cces$indiv <- rowMeans(cces[, c("compat", "hurt", "kill", "treatf",
  "justice", "rich")], na.rm = TRUE)
cces$bind <- rowMeans(cces[, c("proudc", "loyalf", "team", "authc",
  "roles", "obey", "disgust", "notnat", "chaste")], na.rm = TRUE)
```

```

# Create a difference score
cces$diffscore <- cces$indiv - cces$bind

# Declare Gender as factor
class(cces$gender)

## [1] "integer"

cces$gender <- as.factor(cces$gender)

```

## Fit Models

I fit five models to include politics, gender, religion, income and education, one at a time.

First, I fit the model with politics, which recreates the model that I reported in the Moral Foundations Questionnaire analysis. Each subsequent model adds the demographic variables in the order listed above.

```

# With Politics
fit1 <- lm(diffscore ~ ideo5, data = cces)
summary(fit1)

##
## Call:
## lm(formula = diffscore ~ ideo5, data = cces)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -2.9371 -0.8223  0.0357  0.6636  3.4620
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)   1.8357     0.2196   8.361 9.63e-15 ***
## ideo5         -0.4996     0.0651  -7.673 6.78e-13 ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 1.124 on 204 degrees of freedom
## (533 observations deleted due to missingness)
## Multiple R-squared:  0.224, Adjusted R-squared:  0.2202
## F-statistic: 58.88 on 1 and 204 DF, p-value: 6.778e-13

# Plus Gender
fit2 <- lm(diffscore ~ ideo5 + gender, data = cces)
summary(fit2)

```

```
##
## Call:
## lm(formula = diffscore ~ ideo5 + gender, data = cces)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -2.9552 -0.8063  0.0358  0.6829  3.4389
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)  1.80748    0.24868   7.268 7.70e-12 ***
## ideo5        -0.49705    0.06606  -7.525 1.68e-12 ***
## gender2       0.03885    0.15917   0.244  0.807
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 1.127 on 203 degrees of freedom
## (533 observations deleted due to missingness)
## Multiple R-squared:  0.2242, Adjusted R-squared:  0.2166
## F-statistic: 29.34 on 2 and 203 DF, p-value: 6.438e-12

# Plus Religion
fit3 <- lm(diffscore ~ ideo5 + gender + religattend, data = cces)
summary(fit3)

##
## Call:
## lm(formula = diffscore ~ ideo5 + gender + religattend, data = cces)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -3.0180 -0.8199 -0.0013  0.6750  3.4029
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)  1.64562    0.39011   4.218 3.72e-05 ***
## ideo5        -0.48333    0.07099  -6.809 1.11e-10 ***
## gender2       0.05963    0.16299   0.366  0.715
## religattend  0.02712    0.05027   0.539  0.590
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 1.131 on 201 degrees of freedom
## (534 observations deleted due to missingness)
## Multiple R-squared:  0.2257, Adjusted R-squared:  0.2141
```

```
## F-statistic: 19.53 on 3 and 201 DF, p-value: 3.768e-11
```

#### *# Plus Income*

```
fit4 <- lm(diffscore ~ ideo5 + gender + religattend + income,  
  data = cces)  
summary(fit4)
```

```
##  
## Call:  
## lm(formula = diffscore ~ ideo5 + gender + religattend + income,  
##     data = cces)  
##  
## Residuals:  
##      Min       1Q   Median       3Q      Max   
## -2.9734 -0.8391  0.0169  0.7154  3.5137   
##  
## Coefficients:  
##              Estimate Std. Error t value Pr(>|t|)      
## (Intercept)  1.822786   0.472417   3.858 0.000161 ***  
## ideo5        -0.527018   0.080280  -6.565 5.99e-10 ***  
## gender2       0.006800   0.186543   0.036 0.970964      
## religattend  0.033718   0.056899   0.593 0.554235      
## income       -0.008604   0.027786  -0.310 0.757204      
## ---  
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1  
##  
## Residual standard error: 1.168 on 171 degrees of freedom  
## (563 observations deleted due to missingness)  
## Multiple R-squared:  0.2411, Adjusted R-squared:  0.2233   
## F-statistic: 13.58 on 4 and 171 DF, p-value: 1.237e-09
```

#### *# Plus Education*

```
fit5 <- lm(diffscore ~ ideo5 + gender + religattend + income +  
  educ, data = cces)  
summary(fit5)
```

```
##  
## Call:  
## lm(formula = diffscore ~ ideo5 + gender + religattend + income +  
##     educ, data = cces)  
##  
## Residuals:  
##      Min       1Q   Median       3Q      Max   
## -2.6967 -0.7381  0.0327  0.7034  3.6814   
##  
## Coefficients:
```

```

##           Estimate Std. Error t value Pr(>|t|)
## (Intercept)  1.226200   0.535677   2.289   0.0233 *
## ideo5        -0.494027   0.080643  -6.126 6.07e-09 ***
## gender2       0.008938   0.184320   0.048   0.9614
## religattend   0.054065   0.056930   0.950   0.3436
## income       -0.029532   0.028961  -1.020   0.3093
## educ          0.142500   0.062773   2.270   0.0245 *
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 1.154 on 170 degrees of freedom
## (563 observations deleted due to missingness)
## Multiple R-squared:  0.2634, Adjusted R-squared:  0.2417
## F-statistic: 12.16 on 5 and 170 DF, p-value: 4.436e-10

```