Replication File Chapter 3

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Packages and Data Preparation

Packages

```r
library(tidyverse)
library(stringr)
library(brms)
library(data.table)
library(matrixStats)


base_folder <- "../data/"
```

Load data and Remove Subjects who know the Actor

```r
load(file = paste0(base_folder, "subjects_with_emotions_2.Rda"))
#(with subjects who know actor name removed)
load(file = paste0(base_folder, "subjetcs_by_group_no_know_sp.Rda"))
# one observation: one response time to the four question pages and left-right
# and feeling therm
load(file = paste0(base_folder, "subjects_rsp.Rda"))

# table(subjects$know_name_schauspieler)
# remove those from the subjects
subjects <- dplyr::filter(subjects, is.na(know_name_schauspieler))

# remove the same subjects from the rsp_dataset
subjects_rsp <- dplyr::filter(subjects_rsp, subjects_rsp$id %in% subjects$id)
```

Additional Data Prep

```r
# make female dummy (only male and female is used from the gender options):
# gender: 1:weiblich, 2: männlich, 3: divers, 4: keine Angabe
# female: 1 = female, 0 = male
subjects$female <- ifelse(subjects$gender==1, 1, 0)
```

```
# Make neutral group the baseline for the emo_char_factor
subjects <- within(subjects,
                   emotion_group_char_neutral_base <- relevel(
                     as.factor(emotion_group_char), ref = "neutral"))
```

Treatment Videos on Emotional Reaction of the Subjects (I -> II)

Emotion Self-Reports by Treatment Group

```
# Scales
summary(lm(aversion ~ emotion_group_char_neutral_base, data = subjects))
```

```
##
## Call:
## lm(formula = aversion ~ emotion_group_char_neutral_base, data = subjects)
##
## Residuals:
##     Min      1Q  Median      3Q     Max
## -0.3946 -0.1598  0.0210  0.1525  0.4929
##
## Coefficients:
##                                        Estimate Std. Error t value Pr(>|t|)
## (Intercept)                             0.39461    0.02997  13.168  < 2e-16 ***
## emotion_group_char_neutral_baseanger   -0.04712    0.03964  -1.189  0.23602
## emotion_group_char_neutral_baseanxiety -0.10660    0.03979  -2.679  0.00802 **
## emotion_group_char_neutral_basereal    -0.03461    0.04649  -0.745  0.45746
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.201 on 192 degrees of freedom
## Multiple R-squared:  0.03826,    Adjusted R-squared:  0.02323
## F-statistic: 2.546 on 3 and 192 DF,  p-value: 0.05731
```

```
summary(lm(fear ~ emotion_group_char_neutral_base, data = subjects))
```

```
##
## Call:
## lm(formula = fear ~ emotion_group_char_neutral_base, data = subjects)
##
## Residuals:
##     Min      1Q  Median      3Q     Max
## -0.5186 -0.1407  0.0459  0.1516  0.4214
##
## Coefficients:
##                                        Estimate Std. Error t value Pr(>|t|)
## (Intercept)                             0.55956    0.03117  17.949   <2e-16 ***
## emotion_group_char_neutral_baseanger   -0.03433    0.04124  -0.833    0.406
## emotion_group_char_neutral_baseanxiety -0.02713    0.04139  -0.655    0.513
## emotion_group_char_neutral_basereal    -0.01383    0.04836  -0.286    0.775
```

```
## ---
## Signif. codes:  0 ’***’ 0.001 ’**’ 0.01 ’*’ 0.05 ’.’ 0.1 ’ ’ 1
##
## Residual standard error: 0.2091 on 192 degrees of freedom
## Multiple R-squared:  0.004077,   Adjusted R-squared:  -0.01148
## F-statistic: 0.262 on 3 and 192 DF,  p-value: 0.8527
```

```r
summary(lm(enthusiasm ~ emotion_group_char_neutral_base, data = subjects))
```

```
##
## Call:
## lm(formula = enthusiasm ~ emotion_group_char_neutral_base, data = subjects)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -0.26719 -0.13459 -0.03571  0.11052  0.54052
##
## Coefficients:
##                                             Estimate Std. Error t value Pr(>|t|)
## (Intercept)                                 0.256148   0.025809   9.925   <2e-16
## emotion_group_char_neutral_baseanger       -0.044204   0.034142  -1.295    0.197
## emotion_group_char_neutral_baseanxiety     -0.009368   0.034266  -0.273    0.785
## emotion_group_char_neutral_basereal         0.041039   0.040035   1.025    0.307
##
## (Intercept)                                 ***
## emotion_group_char_neutral_baseanger
## emotion_group_char_neutral_baseanxiety
## emotion_group_char_neutral_basereal
## ---
## Signif. codes:  0 ’***’ 0.001 ’**’ 0.01 ’*’ 0.05 ’.’ 0.1 ’ ’ 1
##
## Residual standard error: 0.1731 on 192 degrees of freedom
## Multiple R-squared:  0.02673,    Adjusted R-squared:  0.01152
## F-statistic: 1.758 on 3 and 192 DF,  p-value: 0.1567
```

```r
# Scalte Items
summary(lm(fear_aengstlich/100 ~ emotion_group_char_neutral_base,
           data = subjects))
```

```
##
## Call:
## lm(formula = fear_aengstlich/100 ~ emotion_group_char_neutral_base,
##     data = subjects)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -0.44222 -0.25487  0.09076  0.20483  0.49233
##
## Coefficients:
##                                             Estimate Std. Error t value Pr(>|t|)
## (Intercept)                                 0.442222   0.040087  11.031   <2e-16
## emotion_group_char_neutral_baseanger       -0.004556   0.053031  -0.086    0.932
## emotion_group_char_neutral_baseanxiety     -0.007815   0.053223  -0.147    0.883
```

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```
## emotion_group_char_neutral_basereal      -0.035972    0.062184  -0.578      0.564
##
## (Intercept)                                    ***
## emotion_group_char_neutral_baseanger
## emotion_group_char_neutral_baseanxiety
## emotion_group_char_neutral_basereal
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.2689 on 192 degrees of freedom
## Multiple R-squared:  0.002021,   Adjusted R-squared:  -0.01357
## F-statistic: 0.1296 on 3 and 192 DF,  p-value: 0.9424
```

```r
summary(lm(fear_besorgnis/100 ~ emotion_group_char_neutral_base,
           data = subjects))
```

```
##
## Call:
## lm(formula = fear_besorgnis/100 ~ emotion_group_char_neutral_base,
##     data = subjects)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -0.57817 -0.08375  0.02527  0.13515  0.40183
##
## Coefficients:
##                                       Estimate Std. Error t value Pr(>|t|)
## (Intercept)                           0.647727   0.030932  20.940   <2e-16
## emotion_group_char_neutral_baseanger -0.079561   0.040724  -1.954   0.0522
## emotion_group_char_neutral_baseanxiety -0.046003  0.041020  -1.121   0.2635
## emotion_group_char_neutral_basereal   0.006023   0.047670   0.126   0.8996
##
## (Intercept)                                    ***
## emotion_group_char_neutral_baseanger   .
## emotion_group_char_neutral_baseanxiety
## emotion_group_char_neutral_basereal
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.2052 on 190 degrees of freedom
##   (2 observations deleted due to missingness)
## Multiple R-squared:  0.02828,    Adjusted R-squared:  0.01294
## F-statistic: 1.843 on 3 and 190 DF,  p-value: 0.1407
```

```r
summary(lm(fear_beunruhigung/100 ~ emotion_group_char_neutral_base,
           data = subjects))
```

```
##
## Call:
## lm(formula = fear_beunruhigung/100 ~ emotion_group_char_neutral_base,
##     data = subjects)
##
## Residuals:
```

```
##      Min      1Q   Median      3Q      Max
## -0.58378 -0.14167  0.03276  0.16083  0.44271
##
## Coefficients:
##                                      Estimate Std. Error t value Pr(>|t|)
## (Intercept)                           0.58378    0.03492  16.716   <2e-16 ***
## emotion_group_char_neutral_baseanger -0.01394    0.04620  -0.302    0.763
## emotion_group_char_neutral_baseanxiety -0.02649  0.04637  -0.571    0.568
## emotion_group_char_neutral_basereal  -0.00659    0.05417  -0.122    0.903
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.2343 on 192 degrees of freedom
## Multiple R-squared:  0.001865,   Adjusted R-squared:  -0.01373
## F-statistic: 0.1196 on 3 and 192 DF,  p-value: 0.9485
```

```r
summary(lm(aversion_wut/100 ~ emotion_group_char_neutral_base,
          data = subjects))
```

```
##
## Call:
## lm(formula = aversion_wut/100 ~ emotion_group_char_neutral_base,
##     data = subjects)
##
## Residuals:
##      Min      1Q   Median      3Q      Max
## -0.47111 -0.22895  0.05889  0.19889  0.51322
##
## Coefficients:
##                                      Estimate Std. Error t value Pr(>|t|)
## (Intercept)                           0.47111    0.03680  12.801   <2e-16 ***
## emotion_group_char_neutral_baseanger -0.07857    0.04886  -1.608   0.1095
## emotion_group_char_neutral_baseanxiety -0.12433  0.04886  -2.545   0.0117 *
## emotion_group_char_neutral_basereal  -0.03767    0.05709  -0.660   0.5101
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.2469 on 191 degrees of freedom
##   (1 observation deleted due to missingness)
## Multiple R-squared:  0.03573,   Adjusted R-squared:  0.02058
## F-statistic: 2.359 on 3 and 191 DF,  p-value: 0.07297
```

```r
summary(lm(aversion_hass/100 ~ emotion_group_char_neutral_base,
          data = subjects))
```

```
##
## Call:
## lm(formula = aversion_hass/100 ~ emotion_group_char_neutral_base,
##     data = subjects)
##
## Residuals:
##      Min      1Q   Median      3Q      Max
## -0.26822 -0.18424 -0.01493  0.14883  0.56178
```

```
## 
## Coefficients:
##                                              Estimate Std. Error t value Pr(>|t|)
## (Intercept)                                   0.26822    0.03179   8.436  7.8e-15 ***
## emotion_group_char_neutral_baseanger         -0.03456    0.04206  -0.822   0.4123
## emotion_group_char_neutral_baseanxiety       -0.08398    0.04221  -1.990   0.0481 *
## emotion_group_char_neutral_basereal          -0.05260    0.04932  -1.066   0.2876
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
## 
## Residual standard error: 0.2133 on 192 degrees of freedom
## Multiple R-squared:  0.02119,    Adjusted R-squared:  0.005901
## F-statistic: 1.386 on 3 and 192 DF,  p-value: 0.2484
```

```r
summary(lm(aversion_zorn/100 ~ emotion_group_char_neutral_base,
          data = subjects))
```

```
## 
## Call:
## lm(formula = aversion_zorn/100 ~ emotion_group_char_neutral_base,
##     data = subjects)
## 
## Residuals:
##      Min       1Q   Median       3Q      Max
## -0.36667 -0.22949 -0.02632  0.22943  0.52333
## 
## Coefficients:
##                                              Estimate Std. Error t value Pr(>|t|)
## (Intercept)                                   0.36667    0.03648  10.051   <2e-16 ***
## emotion_group_char_neutral_baseanger         -0.06200    0.04826  -1.285   0.2004
## emotion_group_char_neutral_baseanxiety       -0.11870    0.04843  -2.451   0.0151 *
## emotion_group_char_neutral_basereal          -0.04479    0.05659  -0.792   0.4296
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
## 
## Residual standard error: 0.2447 on 192 degrees of freedom
## Multiple R-squared:  0.03135,    Adjusted R-squared:  0.01622
## F-statistic: 2.071 on 3 and 192 DF,  p-value: 0.1054
```

```r
summary(lm(aversion_aufgebracht/100 ~ emotion_group_char_neutral_base,
          data = subjects))
```

```
## 
## Call:
## lm(formula = aversion_aufgebracht/100 ~ emotion_group_char_neutral_base,
##     data = subjects)
## 
## Residuals:
##      Min       1Q   Median       3Q      Max
## -0.47244 -0.18305  0.08256  0.16094  0.54783
## 
## Coefficients:
##                                              Estimate Std. Error t value Pr(>|t|)
```

```
## (Intercept)                                     0.472444   0.036105  13.085   <2e-16
## emotion_group_char_neutral_baseanger   -0.020278   0.047762  -0.425   0.6716
## emotion_group_char_neutral_baseanxiety -0.099394   0.047935  -2.073   0.0395
## emotion_group_char_neutral_basereal    -0.003382   0.056006  -0.060   0.9519
##
## (Intercept)                             ***
## emotion_group_char_neutral_baseanger
## emotion_group_char_neutral_baseanxiety *
## emotion_group_char_neutral_basereal
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.2422 on 192 degrees of freedom
## Multiple R-squared:  0.02966,   Adjusted R-squared:  0.01449
## F-statistic: 1.956 on 3 and 192 DF,  p-value: 0.122
```

```r
summary(lm(enthusiasm_hoffnung/100 ~ emotion_group_char_neutral_base,
          data = subjects))
```

```
##
## Call:
## lm(formula = enthusiasm_hoffnung/100 ~ emotion_group_char_neutral_base,
##     data = subjects)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -0.33219 -0.13701 -0.01369  0.11870  0.54678
##
## Coefficients:
##                                         Estimate Std. Error t value Pr(>|t|)
## (Intercept)                              0.30556    0.02864  10.669   <2e-16 ***
## emotion_group_char_neutral_baseanger    -0.06139    0.03789  -1.620    0.107
## emotion_group_char_neutral_baseanxiety  -0.02234    0.03802  -0.587    0.558
## emotion_group_char_neutral_basereal      0.06663    0.04443   1.500    0.135
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.1921 on 192 degrees of freedom
## Multiple R-squared:  0.04778,   Adjusted R-squared:  0.03291
## F-statistic: 3.212 on 3 and 192 DF,  p-value: 0.02414
```

```r
summary(lm(enthusiasm_stolz/100 ~ emotion_group_char_neutral_base,
          data = subjects))
```

```
##
## Call:
## lm(formula = enthusiasm_stolz/100 ~ emotion_group_char_neutral_base,
##     data = subjects)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -0.22625 -0.14967 -0.06333  0.12033  0.61667
##
```

```
## Coefficients:
##                                     Estimate Std. Error t value Pr(>|t|)
## (Intercept)                         0.203333   0.028829   7.053 3.08e-11
## emotion_group_char_neutral_baseanger   -0.053667   0.038137  -1.407    0.161
## emotion_group_char_neutral_baseanxiety -0.008418   0.038275  -0.220    0.826
## emotion_group_char_neutral_basereal     0.022917   0.044719   0.512    0.609
##
## (Intercept)                         ***
## emotion_group_char_neutral_baseanger
## emotion_group_char_neutral_baseanxiety
## emotion_group_char_neutral_basereal
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.1934 on 192 degrees of freedom
## Multiple R-squared:  0.02025,    Adjusted R-squared:  0.004937
## F-statistic: 1.323 on 3 and 192 DF,  p-value: 0.2683
```

```
summary(lm(enthusiasm_enthusiastisch/100 ~ emotion_group_char_neutral_base,
           data = subjects))
```

```
##
## Call:
## lm(formula = enthusiasm_enthusiastisch/100 ~ emotion_group_char_neutral_base,
##     data = subjects)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -0.29313 -0.18228 -0.01634  0.13861  0.66044
##
## Coefficients:
##                                     Estimate Std. Error t value Pr(>|t|)
## (Intercept)                         0.259556   0.031929   8.129 5.21e-14
## emotion_group_char_neutral_baseanger   -0.017556   0.042238  -0.416    0.678
## emotion_group_char_neutral_baseanxiety  0.002648   0.042391   0.062    0.950
## emotion_group_char_neutral_basereal     0.033569   0.049528   0.678    0.499
##
## (Intercept)                         ***
## emotion_group_char_neutral_baseanger
## emotion_group_char_neutral_baseanxiety
## emotion_group_char_neutral_basereal
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.2142 on 192 degrees of freedom
## Multiple R-squared:  0.006184,   Adjusted R-squared:  -0.009345
## F-statistic: 0.3982 on 3 and 192 DF,  p-value: 0.7544
```

```
summary(lm(fear ~ emotion_group_char_neutral_base, data = subjects))
```

```
##
## Call:
## lm(formula = fear ~ emotion_group_char_neutral_base, data = subjects)
```

```
##
## Residuals:
##     Min      1Q  Median      3Q     Max
## -0.5186 -0.1407  0.0459  0.1516  0.4214
##
## Coefficients:
##                                      Estimate Std. Error t value Pr(>|t|)
## (Intercept)                           0.55956    0.03117  17.949   <2e-16 ***
## emotion_group_char_neutral_baseanger -0.03433    0.04124  -0.833    0.406
## emotion_group_char_neutral_baseanxiety -0.02713  0.04139  -0.655    0.513
## emotion_group_char_neutral_basereal  -0.01383    0.04836  -0.286    0.775
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.2091 on 192 degrees of freedom
## Multiple R-squared:  0.004077,   Adjusted R-squared:  -0.01148
## F-statistic: 0.262 on 3 and 192 DF,  p-value: 0.8527
```

```r
summary(lm(aversion ~ emotion_group_char_neutral_base, data = subjects))
```

```
##
## Call:
## lm(formula = aversion ~ emotion_group_char_neutral_base, data = subjects)
##
## Residuals:
##     Min      1Q  Median      3Q     Max
## -0.3946 -0.1598  0.0210  0.1525  0.4929
##
## Coefficients:
##                                      Estimate Std. Error t value Pr(>|t|)
## (Intercept)                           0.39461    0.02997  13.168  < 2e-16 ***
## emotion_group_char_neutral_baseanger -0.04712    0.03964  -1.189  0.23602
## emotion_group_char_neutral_baseanxiety -0.10660  0.03979  -2.679  0.00802 **
## emotion_group_char_neutral_basereal  -0.03461    0.04649  -0.745  0.45746
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.201 on 192 degrees of freedom
## Multiple R-squared:  0.03826,    Adjusted R-squared:  0.02323
## F-statistic: 2.546 on 3 and 192 DF,  p-value: 0.05731
```

```r
summary(lm(enthusiasm ~ emotion_group_char_neutral_base, data = subjects))
```

```
##
## Call:
## lm(formula = enthusiasm ~ emotion_group_char_neutral_base, data = subjects)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -0.26719 -0.13459 -0.03571  0.11052  0.54052
##
## Coefficients:
##                                      Estimate Std. Error t value Pr(>|t|)
```

```
## (Intercept)                                   0.256148   0.025809   9.925   <2e-16
## emotion_group_char_neutral_baseanger         -0.044204   0.034142  -1.295    0.197
## emotion_group_char_neutral_baseanxiety       -0.009368   0.034266  -0.273    0.785
## emotion_group_char_neutral_basereal           0.041039   0.040035   1.025    0.307
##
## (Intercept)                                   ***
## emotion_group_char_neutral_baseanger
## emotion_group_char_neutral_baseanxiety
## emotion_group_char_neutral_basereal
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.1731 on 192 degrees of freedom
## Multiple R-squared:  0.02673,    Adjusted R-squared:  0.01152
## F-statistic: 1.758 on 3 and 192 DF,  p-value: 0.1567
```

Emotions in Facial Expressions by Treatment Group

```
# Anger
summary(lm(emo_anger_mean ~ emotion_group_char_neutral_base,
          data = subjects))
```

```
##
## Call:
## lm(formula = emo_anger_mean ~ emotion_group_char_neutral_base,
##     data = subjects)
##
## Residuals:
##    Min     1Q Median     3Q    Max
## -5.943 -4.514 -3.047 -1.558 51.704
##
## Coefficients:
##                                         Estimate Std. Error t value Pr(>|t|)
## (Intercept)                                2.650      1.555   1.705   0.0901 .
## emotion_group_char_neutral_baseanger       2.127      1.990   1.069   0.2866
## emotion_group_char_neutral_baseanxiety     1.071      2.026   0.529   0.5975
## emotion_group_char_neutral_basereal        3.294      2.369   1.391   0.1662
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 9.456 on 172 degrees of freedom
##   (20 observations deleted due to missingness)
## Multiple R-squared:  0.01318,    Adjusted R-squared:  -0.00403
## F-statistic: 0.7659 on 3 and 172 DF,  p-value: 0.5146
```

```
# Fear/Surprise
# add fear and surprise
subjects$emo_fear_surp_mean <- subjects$emo_fear_mean +
  subjects$emo_surprise_mean
summary(lm(emo_fear_surp_mean ~ emotion_group_char_neutral_base,
          data = subjects))
```

```
## 
## Call:
## lm(formula = emo_fear_surp_mean ~ emotion_group_char_neutral_base,
##     data = subjects)
## 
## Residuals:
##     Min     1Q Median     3Q    Max
## -3.387 -1.565 -0.958 -0.430 48.490
## 
## Coefficients:
##                                         Estimate Std. Error t value Pr(>|t|)
## (Intercept)                               0.6829     0.8111   0.842   0.4010
## emotion_group_char_neutral_baseanger      0.4308     1.0380   0.415   0.6786
## emotion_group_char_neutral_baseanxiety    1.0013     1.0569   0.947   0.3448
## emotion_group_char_neutral_basereal       2.7051     1.2358   2.189   0.0299 *
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
## 
## Residual standard error: 4.934 on 172 degrees of freedom
##   (20 observations deleted due to missingness)
## Multiple R-squared:  0.0311, Adjusted R-squared:  0.01421
## F-statistic: 1.841 on 3 and 172 DF,  p-value: 0.1416
```

Subjects' Expressions of Anger (Model (3.1))

```r
# this loads the model; if you wish to run it: change the filename
anger_mean_brm <- brm(anger_mean ~
                      fear_surp_mean_sp + anger_mean_sp +
                      fear_surp_mean_sp_l2 + anger_mean_sp_l2 +
                      (1|video_name) + (1|id),
                        data = emo_face_time,
                        control = list(adapt_delta = 0.99),
                        iter = 30000,
                     thin = 3,
                     file = paste0(base_folder, "anger_mean_brm"))

summary(anger_mean_brm)
```

```
##  Family: gaussian
##   Links: mu = identity; sigma = identity
## Formula: anger_mean ~ fear_surp_mean_sp + anger_mean_sp + fear_surp_mean_sp_l2 + anger_mean_sp_l2 +
##    Data: emo_face_time (Number of observations: 38087)
## Samples: 4 chains, each with iter = 30000; warmup = 15000; thin = 3;
##          total post-warmup samples = 20000
## 
## Group-Level Effects:
## ~id (Number of levels: 176)
##               Estimate Est.Error l-95% CI u-95% CI Rhat Bulk_ESS Tail_ESS
## sd(Intercept)     9.24      0.50     8.33    10.29 1.00     2035     4082
## 
## ~video_name (Number of levels: 5)
##               Estimate Est.Error l-95% CI u-95% CI Rhat Bulk_ESS Tail_ESS
```

```
## sd(Intercept)     0.61      0.38     0.24      1.57 1.00     11254     14039
##
## Population-Level Effects:
##                     Estimate Est.Error l-95% CI u-95% CI Rhat Bulk_ESS
## Intercept               3.99      0.78     2.46     5.51 1.01      700
## fear_surp_mean_sp       0.00      0.00    -0.00     0.01 1.00    19430
## anger_mean_sp          -0.00      0.00    -0.01     0.00 1.00    20245
## fear_surp_mean_sp_l2    0.00      0.00    -0.00     0.01 1.00    19458
## anger_mean_sp_l2       -0.00      0.00    -0.01     0.00 1.00    19784
##                     Tail_ESS
## Intercept               1822
## fear_surp_mean_sp      19473
## anger_mean_sp          20097
## fear_surp_mean_sp_l2   19038
## anger_mean_sp_l2       18490
##
## Family Specific Parameters:
##       Estimate Est.Error l-95% CI u-95% CI Rhat Bulk_ESS Tail_ESS
## sigma    10.95      0.04    10.87    11.03 1.00    20073    18940
##
## Samples were drawn using sampling(NUTS). For each parameter, Bulk_ESS
## and Tail_ESS are effective sample size measures, and Rhat is the potential
## scale reduction factor on split chains (at convergence, Rhat = 1).
```

```
# plot(anger_mean_brm)
rm(anger_mean_brm)
```

Subjects' Expressions of Fear/ Surprise (Model (3.2))

```
# this loads the model; if you wish to run it: change the filename
fear_surp_mean_brm <- brm(fear_surp_mean ~
                        fear_surp_mean_sp + anger_mean_sp +
                        fear_surp_mean_sp_l2 + anger_mean_sp_l2 +
                        (1|video_name) + (1|id),
                data = emo_face_time,
                control = list(adapt_delta = 0.99),
                iter = 30000,
                thin = 3,
                file = paste0(base_folder, "fear_surp_mean_brm"))

summary(fear_surp_mean_brm)
```

```
##  Family: gaussian
##   Links: mu = identity; sigma = identity
## Formula: fear_surp_mean ~ fear_surp_mean_sp + anger_mean_sp + fear_surp_mean_sp_l2 + anger_mean_sp_l
##    Data: emo_face_time (Number of observations: 38087)
## Samples: 4 chains, each with iter = 30000; warmup = 15000; thin = 3;
##        total post-warmup samples = 20000
##
## Group-Level Effects:
## ~id (Number of levels: 176)
```

```
##             Estimate Est.Error l-95% CI u-95% CI Rhat Bulk_ESS Tail_ESS
## sd(Intercept)    4.59      0.25     4.14     5.12 1.00     4843     8815
##
## ~video_name (Number of levels: 5)
##             Estimate Est.Error l-95% CI u-95% CI Rhat Bulk_ESS Tail_ESS
## sd(Intercept)    0.47      0.28     0.19     1.23 1.00    12367    15461
##
## Population-Level Effects:
##                       Estimate Est.Error l-95% CI u-95% CI Rhat Bulk_ESS
## Intercept                 1.45      0.42     0.61     2.24 1.00     1236
## fear_surp_mean_sp         0.00      0.00    -0.00     0.00 1.00    20669
## anger_mean_sp             0.00      0.00    -0.00     0.00 1.00    20736
## fear_surp_mean_sp_l2     -0.00      0.00    -0.00     0.00 1.00    20276
## anger_mean_sp_l2          0.00      0.00    -0.00     0.00 1.00    21004
##                       Tail_ESS
## Intercept                 3044
## fear_surp_mean_sp        19641
## anger_mean_sp            17906
## fear_surp_mean_sp_l2     19601
## anger_mean_sp_l2         19451
##
## Family Specific Parameters:
##       Estimate Est.Error l-95% CI u-95% CI Rhat Bulk_ESS Tail_ESS
## sigma     6.39      0.02     6.34     6.43 1.00    19757    19138
##
## Samples were drawn using sampling(NUTS). For each parameter, Bulk_ESS
## and Tail_ESS are effective sample size measures, and Rhat is the potential
## scale reduction factor on split chains (at convergence, Rhat = 1).
```

```r
#plot(fear_surp_mean_brm)
rm(fear_surp_mean_brm)
```

Emotional Reaction on Operating System (II -> III)

Subjects' Emotion Self-Reports on Response Time (Model (3.3))

```r
# remove single outlier response time
subjects_rsp <- subjects_rsp[subjects_rsp$response_time<=100,]

# add the emo_self_report info to subjects_rsp
subjects_rsp <- left_join(
  x = subjects_rsp,
  y = subjects[,c("fear", "aversion", "enthusiasm", "id", "female", "auth")],
  by = "id"
)

# Model
# this loads the model; if you wish to run it: change the filename
rsp_emo_sr_brm <- brm(
  formula = response_time ~
    fear + aversion + enthusiasm + (1|id) + female + auth,
```

```
  data = subjects_rsp,
  family = shifted_lognormal(),
  file = paste0(base_folder, "rsp_emo_sr_brm_female_auth")
  )

summary(rsp_emo_sr_brm)
```

```
##  Family: shifted_lognormal
##   Links: mu = identity; sigma = identity; ndt = identity
## Formula: response_time ~ fear + aversion + enthusiasm + (1 | id) + female + auth
##    Data: subjects_rsp (Number of observations: 1175)
## Samples: 4 chains, each with iter = 2000; warmup = 1000; thin = 1;
##          total post-warmup samples = 4000
##
## Group-Level Effects:
## ~id (Number of levels: 196)
##                Estimate Est.Error l-95% CI u-95% CI Rhat Bulk_ESS Tail_ESS
## sd(Intercept)      0.22      0.02     0.18     0.26 1.00     1894     2300
##
## Population-Level Effects:
##             Estimate Est.Error l-95% CI u-95% CI Rhat Bulk_ESS Tail_ESS
## Intercept       3.26      0.07     3.12     3.40 1.00     1989     2704
## fear            0.24      0.11     0.03     0.45 1.00     1803     2674
## aversion       -0.22      0.11    -0.43    -0.00 1.00     2216     2703
## enthusiasm      0.12      0.11    -0.10     0.34 1.00     1771     2703
## female         -0.13      0.04    -0.21    -0.04 1.00     1823     2839
## auth           -0.02      0.02    -0.05     0.02 1.00     2006     2713
##
## Family Specific Parameters:
##       Estimate Est.Error l-95% CI u-95% CI Rhat Bulk_ESS Tail_ESS
## sigma     0.41      0.01     0.39     0.43 1.00     3677     2751
## ndt       0.17      0.16     0.00     0.59 1.00     3687     2380
##
## Samples were drawn using sampling(NUTS). For each parameter, Bulk_ESS
## and Tail_ESS are effective sample size measures, and Rhat is the potential
## scale reduction factor on split chains (at convergence, Rhat = 1).
```

```
#plot(rsp_emo_sr_brm)
rm(rsp_emo_sr_brm)
```

Operating System on Political Attitude (III -> IV)

```
# calculate response time means
subjects_rsp_mean <- subjects_rsp %>%
  group_by(id) %>%
  summarise(response_time_mean = mean(response_time))
```

```
## `summarise()` ungrouping output (override with `.groups` argument)
```

```
# add response time means to the subjects data
subjects <- left_join(x = subjects, y = subjects_rsp_mean)
```

```
## Joining, by = "id"
```

```
# OLS populism on response time, with controls
summary(lm(pop ~ response_time_mean + auth + female, data = subjects))
```

```
##
## Call:
## lm(formula = pop ~ response_time_mean + auth + female, data = subjects)
##
## Residuals:
##      Min      1Q  Median      3Q     Max
## -1.50933 -0.37191 -0.02023  0.37673  1.84524
##
## Coefficients:
##                    Estimate Std. Error t value Pr(>|t|)
## (Intercept)        3.248810   0.172711  18.811   <2e-16 ***
## response_time_mean -0.008018   0.004730  -1.695   0.0917 .
## auth               0.025674   0.038736   0.663   0.5083
## female             0.134480   0.081591   1.648   0.1009
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.542 on 192 degrees of freedom
## Multiple R-squared:  0.03605,    Adjusted R-squared:  0.02099
## F-statistic: 2.394 on 3 and 192 DF,  p-value: 0.06975
```

```
summary(lm(pop_buergerwillen ~ response_time_mean + auth  + female,
          data = subjects))
```

```
##
## Call:
## lm(formula = pop_buergerwillen ~ response_time_mean + auth +
##     female, data = subjects)
##
## Residuals:
##      Min      1Q  Median      3Q     Max
## -2.10797 -0.68787  0.02315  0.42555  1.28414
##
## Coefficients:
##                    Estimate Std. Error t value Pr(>|t|)
## (Intercept)        4.339965   0.245144  17.704   <2e-16 ***
## response_time_mean -0.015584   0.006702  -2.325   0.0211 *
## auth               0.035522   0.055129   0.644   0.5201
## female             0.002639   0.115734   0.023   0.9818
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.7673 on 190 degrees of freedom
##   (2 observations deleted due to missingness)
```

```
## Multiple R-squared:  0.03145,    Adjusted R-squared:  0.01616
## F-statistic: 2.057 on 3 and 190 DF,  p-value: 0.1074
```

```
summary(lm(pop_entscheidungen ~ response_time_mean + auth  + female,
           data = subjects))
```

```
##
## Call:
## lm(formula = pop_entscheidungen ~ response_time_mean + auth +
##     female, data = subjects)
##
## Residuals:
##     Min      1Q  Median      3Q     Max
## -1.8422 -0.8092  0.1638  0.4102  2.4349
##
## Coefficients:
##                    Estimate Std. Error t value Pr(>|t|)
## (Intercept)        2.497803   0.337167   7.408 4.01e-12 ***
## response_time_mean 0.003191   0.009249   0.345    0.730
## auth               0.004412   0.075947   0.058    0.954
## female             0.229864   0.159501   1.441    0.151
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 1.058 on 191 degrees of freedom
##   (1 observation deleted due to missingness)
## Multiple R-squared:  0.01091,    Adjusted R-squared:  -0.004625
## F-statistic: 0.7023 on 3 and 191 DF,  p-value: 0.5517
```

```
summary(lm(pop_unterschiede ~ response_time_mean + auth  + female,
           data = subjects))
```

```
##
## Call:
## lm(formula = pop_unterschiede ~ response_time_mean + auth + female,
##     data = subjects)
##
## Residuals:
##     Min      1Q  Median      3Q     Max
## -2.4878 -0.4939  0.3686  0.6371  1.8698
##
## Coefficients:
##                    Estimate Std. Error t value Pr(>|t|)
## (Intercept)         3.96997    0.36763  10.799   <2e-16 ***
## response_time_mean -0.01030    0.01028  -1.001    0.318
## auth               -0.08099    0.08425  -0.961    0.338
## female             -0.24710    0.17479  -1.414    0.159
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 1.049 on 156 degrees of freedom
##   (36 observations deleted due to missingness)
## Multiple R-squared:  0.01871,    Adjusted R-squared:  -0.0001577
## F-statistic: 0.9916 on 3 and 156 DF,  p-value: 0.3984
```

```
summary(lm(pop_buergervertreter ~ response_time_mean + auth  + female,
           data = subjects))
```

```
##
## Call:
## lm(formula = pop_buergervertreter ~ response_time_mean + auth +
##     female, data = subjects)
##
## Residuals:
##     Min     1Q  Median     3Q     Max
## -1.4154 -0.4130 -0.1240  0.5914  2.5926
##
## Coefficients:
##                      Estimate Std. Error t value Pr(>|t|)
## (Intercept)         2.1340277  0.3286974   6.492 7.71e-10 ***
## response_time_mean -0.0005972  0.0090182  -0.066   0.9473
## auth                0.0006528  0.0739059   0.009   0.9930
## female              0.2904470  0.1562587   1.859   0.0647 .
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 1.02 on 183 degrees of freedom
##   (9 observations deleted due to missingness)
## Multiple R-squared:  0.01992,    Adjusted R-squared:  0.003851
## F-statistic:  1.24 on 3 and 183 DF,  p-value: 0.2967
```

```
summary(lm(pop_reden ~ response_time_mean + auth  + female, data = subjects))
```

```
##
## Call:
## lm(formula = pop_reden ~ response_time_mean + auth + female,
##     data = subjects)
##
## Residuals:
##      Min      1Q   Median      3Q      Max
## -2.95593 -0.65151  0.06919  0.80407  1.39074
##
## Coefficients:
##                     Estimate Std. Error t value Pr(>|t|)
## (Intercept)         3.785767   0.297026  12.746   <2e-16 ***
## response_time_mean -0.005757   0.008209  -0.701    0.484
## auth                0.111363   0.066372   1.678    0.095 .
## female              0.199839   0.139455   1.433    0.154
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.9195 on 189 degrees of freedom
##   (3 observations deleted due to missingness)
## Multiple R-squared:  0.02754,    Adjusted R-squared:  0.01211
## F-statistic: 1.784 on 3 and 189 DF,  p-value: 0.1516
```

```r
summary(lm(pop_kompromiss ~ response_time_mean + auth  + female,
           data = subjects))
```

```
##
## Call:
## lm(formula = pop_kompromiss ~ response_time_mean + auth + female,
##     data = subjects)
##
## Residuals:
##     Min      1Q  Median      3Q     Max
## -1.6597 -0.6501 -0.2652  0.5924  2.6481
##
## Coefficients:
##                     Estimate Std. Error t value Pr(>|t|)
## (Intercept)         2.797198   0.347753   8.044 1.21e-13 ***
## response_time_mean -0.019266   0.009625  -2.002   0.0468 *
## auth                0.081339   0.081043   1.004   0.3169
## female              0.162212   0.167260   0.970   0.3335
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 1.077 on 177 degrees of freedom
##   (15 observations deleted due to missingness)
## Multiple R-squared:  0.03704,    Adjusted R-squared:  0.02072
## F-statistic: 2.269 on 3 and 177 DF,  p-value: 0.08212
```

```r
summary(lm(left_right_dist ~ response_time_mean + auth + female, data = subjects))
```

```
##
## Call:
## lm(formula = left_right_dist ~ response_time_mean + auth + female,
##     data = subjects)
##
## Residuals:
##     Min      1Q  Median      3Q     Max
## -1.7401 -0.5960 -0.3563  0.5922  2.6267
##
## Coefficients:
##                     Estimate Std. Error t value Pr(>|t|)
## (Intercept)         1.333228   0.334850   3.982 9.83e-05 ***
## response_time_mean  0.006370   0.009131   0.698    0.486
## auth                0.033697   0.075715   0.445    0.657
## female             -0.142247   0.157809  -0.901    0.369
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 1.032 on 185 degrees of freedom
##   (7 observations deleted due to missingness)
## Multiple R-squared:  0.01039,    Adjusted R-squared:  -0.005663
## F-statistic: 0.6471 on 3 and 185 DF,  p-value: 0.5857
```

```
summary(lm(left_right ~ response_time_mean + auth + female, data = subjects))
```

```
##
## Call:
## lm(formula = left_right ~ response_time_mean + auth + female,
##     data = subjects)
##
## Residuals:
##     Min     1Q  Median     3Q    Max
## -4.6593 -1.2256 -0.1549  1.3327  4.7499
##
## Coefficients:
##                    Estimate Std. Error t value Pr(>|t|)
## (Intercept)         5.44784    0.52815  10.315  < 2e-16 ***
## response_time_mean -0.03558    0.01440  -2.471 0.014385 *
## auth                0.48788    0.11942   4.085 6.55e-05 ***
## female             -0.85531    0.24891  -3.436 0.000728 ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 1.628 on 185 degrees of freedom
##   (7 observations deleted due to missingness)
## Multiple R-squared:  0.1702, Adjusted R-squared:  0.1567
## F-statistic: 12.65 on 3 and 185 DF,  p-value: 1.477e-07
```

Populism and Left-Right Self-Placement on Emotion Self-Reports (II -> IV)

```
summary(lm(pop ~ aversion + fear + enthusiasm + auth + female, data = subjects))
```

```
##
## Call:
## lm(formula = pop ~ aversion + fear + enthusiasm + auth + female,
##     data = subjects)
##
## Residuals:
##      Min      1Q   Median      3Q     Max
## -1.39655 -0.34794 -0.02984  0.34633  1.79890
##
## Coefficients:
##             Estimate Std. Error t value Pr(>|t|)
## (Intercept)  2.89915    0.13789  21.025  < 2e-16 ***
## aversion     0.70255    0.21318   3.296  0.00117 **
## fear        -0.25642    0.21580  -1.188  0.23622
## enthusiasm  -0.06851    0.22064  -0.310  0.75653
## auth         0.03491    0.03812   0.916  0.36096
## female       0.16995    0.08216   2.068  0.03995 *
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
## 
## Residual standard error: 0.5335 on 190 degrees of freedom
## Multiple R-squared:  0.07576,    Adjusted R-squared:  0.05143
## F-statistic: 3.115 on 5 and 190 DF,  p-value: 0.01001
```

```r
summary(lm(pop_buergerwillen ~ aversion + fear + enthusiasm + auth + female,
           data = subjects))
```

```
## 
## Call:
## lm(formula = pop_buergerwillen ~ aversion + fear + enthusiasm +
##     auth + female, data = subjects)
## 
## Residuals:
##     Min       1Q   Median       3Q      Max
## -2.02198 -0.82823  0.04458  0.20319  1.24257
## 
## Coefficients:
##             Estimate Std. Error t value Pr(>|t|)
## (Intercept)  3.86116    0.20319  19.002   <2e-16 ***
## aversion     0.14813    0.31728   0.467    0.641
## fear        -0.27069    0.32459  -0.834    0.405
## enthusiasm   0.30594    0.32364   0.945    0.346
## auth         0.04379    0.05595   0.783    0.435
## female       0.06980    0.12059   0.579    0.563
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
## 
## Residual standard error: 0.779 on 188 degrees of freedom
##   (2 observations deleted due to missingness)
## Multiple R-squared:  0.01208,    Adjusted R-squared:  -0.01419
## F-statistic: 0.4599 on 5 and 188 DF,  p-value: 0.8057
```

```r
summary(lm(pop_entscheidungen ~ aversion + fear + enthusiasm + auth + female,
           data = subjects))
```

```
## 
## Call:
## lm(formula = pop_entscheidungen ~ aversion + fear + enthusiasm +
##     auth + female, data = subjects)
## 
## Residuals:
##     Min      1Q  Median      3Q     Max
## -1.9638 -0.7813  0.1331  0.4324  2.4627
## 
## Coefficients:
##             Estimate Std. Error t value Pr(>|t|)
## (Intercept) 2.613675   0.275172   9.498   <2e-16 ***
## aversion    0.227777   0.424636   0.536    0.592
## fear       -0.261574   0.429819  -0.609    0.544
## enthusiasm  0.137357   0.440299   0.312    0.755
## auth        0.004649   0.076284   0.061    0.951
## female      0.235961   0.163770   1.441    0.151
```

```
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 1.062 on 189 degrees of freedom
##   (1 observation deleted due to missingness)
## Multiple R-squared:  0.01312,    Adjusted R-squared:  -0.01298
## F-statistic: 0.5026 on 5 and 189 DF,  p-value: 0.774
```

```r
summary(lm(pop_unterschiede ~ aversion + fear + enthusiasm + auth + female,
           data = subjects))
```

```
##
## Call:
## lm(formula = pop_unterschiede ~ aversion + fear + enthusiasm +
##     auth + female, data = subjects)
##
## Residuals:
##     Min      1Q  Median      3Q     Max
## -2.4876 -0.5334  0.3148  0.6604  1.9985
##
## Coefficients:
##             Estimate Std. Error t value Pr(>|t|)
## (Intercept)  3.45990    0.30144  11.478   <2e-16 ***
## aversion     0.77582    0.46264   1.677   0.0956 .
## fear        -0.31090    0.46641  -0.667   0.5060
## enthusiasm   0.34270    0.48995   0.699   0.4853
## auth        -0.06585    0.08446  -0.780   0.4368
## female      -0.21269    0.17768  -1.197   0.2331
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 1.048 on 154 degrees of freedom
##   (36 observations deleted due to missingness)
## Multiple R-squared:  0.03397,    Adjusted R-squared:  0.002602
## F-statistic: 1.083 on 5 and 154 DF,  p-value: 0.372
```

```r
summary(lm(pop_buergervertreter ~ aversion + fear + enthusiasm + auth + female,
           data = subjects))
```

```
##
## Call:
## lm(formula = pop_buergervertreter ~ aversion + fear + enthusiasm +
##     auth + female, data = subjects)
##
## Residuals:
##     Min      1Q  Median      3Q     Max
## -1.7336 -0.5794 -0.1922  0.6505  2.6402
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)  2.167090   0.265568   8.160 5.48e-14 ***
## aversion     0.698472   0.416352   1.678   0.0952 .
## fear        -0.221231   0.418927  -0.528   0.5981
```

```
## enthusiasm  -0.824443   0.426579  -1.933   0.0548 .
## auth          0.007789   0.073118   0.107   0.9153
## female        0.327905   0.159281   2.059   0.0410 *
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 1.008 on 181 degrees of freedom
##   (9 observations deleted due to missingness)
## Multiple R-squared:  0.05441,    Adjusted R-squared:  0.02829
## F-statistic: 2.083 on 5 and 181 DF,  p-value: 0.06952
```

```
summary(lm(pop_reden ~ aversion + fear + enthusiasm + auth + female,
          data = subjects))
```

```
##
## Call:
## lm(formula = pop_reden ~ aversion + fear + enthusiasm + auth +
##     female, data = subjects)
##
## Residuals:
##     Min      1Q  Median      3Q     Max
## -2.7764 -0.5732  0.1280  0.6796  1.5874
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)  3.61671    0.23635  15.303   <2e-16 ***
## aversion     0.49315    0.36508   1.351   0.1784
## fear         0.07003    0.36626   0.191   0.8486
## enthusiasm  -0.94601    0.38646  -2.448   0.0153 *
## auth         0.12027    0.06544   1.838   0.0677 .
## female       0.22117    0.13975   1.583   0.1152
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.9051 on 187 degrees of freedom
##   (3 observations deleted due to missingness)
## Multiple R-squared:  0.06771,    Adjusted R-squared:  0.04278
## F-statistic: 2.716 on 5 and 187 DF,  p-value: 0.02144
```

```
summary(lm(pop_kompromiss ~ aversion + fear + enthusiasm + auth + female,
          data = subjects))
```

```
##
## Call:
## lm(formula = pop_kompromiss ~ aversion + fear + enthusiasm +
##     auth + female, data = subjects)
##
## Residuals:
##     Min      1Q  Median      3Q     Max
## -1.8024 -0.8014 -0.1359  0.8897  2.8183
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
```

```
## (Intercept)    1.61316     0.27639    5.837 2.53e-08 ***
## aversion        1.97623     0.42892    4.607 7.82e-06 ***
## fear           -0.42156     0.43274   -0.974    0.331
## enthusiasm      0.52274     0.45566    1.147    0.253
## auth            0.10184     0.07729    1.318    0.189
## female          0.20850     0.16212    1.286    0.200
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 1.025 on 175 degrees of freedom
##   (15 observations deleted due to missingness)
## Multiple R-squared:  0.1367, Adjusted R-squared:  0.112
## F-statistic: 5.543 on 5 and 175 DF,  p-value: 9.154e-05
```

```r
summary(lm(left_right_dist ~ aversion + fear + enthusiasm + auth + female,
           data = subjects))
```

```
##
## Call:
## lm(formula = left_right_dist ~ aversion + fear + enthusiasm +
##     auth + female, data = subjects)
##
## Residuals:
##     Min      1Q  Median      3Q     Max
## -1.9402 -0.5926 -0.1510  0.6098  2.5753
##
## Coefficients:
##             Estimate Std. Error t value Pr(>|t|)
## (Intercept)  1.35822    0.26834   5.062 1.01e-06 ***
## aversion     0.83768    0.42462   1.973    0.050 .
## fear        -0.31013    0.43200  -0.718    0.474
## enthusiasm   0.19646    0.44552   0.441    0.660
## auth         0.03686    0.07533   0.489    0.625
## female      -0.16703    0.16184  -1.032    0.303
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 1.027 on 183 degrees of freedom
##   (7 observations deleted due to missingness)
## Multiple R-squared:  0.03017,    Adjusted R-squared:  0.003671
## F-statistic: 1.139 on 5 and 183 DF,  p-value: 0.3416
```

```r
summary(lm(left_right ~ aversion + fear + enthusiasm + auth + female,
           data = subjects))
```

```
##
## Call:
## lm(formula = left_right ~ aversion + fear + enthusiasm + auth +
##     female, data = subjects)
##
## Residuals:
##     Min      1Q  Median      3Q     Max
## -4.0919 -1.2104 -0.1261  1.2164  4.9561
```

```
## 
## Coefficients:
##             Estimate Std. Error t value Pr(>|t|)
## (Intercept)   5.5658     0.4172  13.340  < 2e-16 ***
## aversion     -0.8614     0.6602  -1.305   0.1936
## fear         -1.3444     0.6717  -2.001   0.0468 *
## enthusiasm   -1.4548     0.6927  -2.100   0.0371 *
## auth          0.5006     0.1171   4.274 3.09e-05 ***
## female       -0.4846     0.2516  -1.926   0.0557 .
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
## 
## Residual standard error: 1.598 on 183 degrees of freedom
##   (7 observations deleted due to missingness)
## Multiple R-squared:  0.2097, Adjusted R-squared:  0.1881
## F-statistic: 9.711 on 5 and 183 DF,  p-value: 3.048e-08
```

Appendix: Additional Results

Balance Tests

```
# Table: Female, Authoritarianism, Age and Actor Knowledge on Treatment Groups
summary(lm(female ~ emotion_group_char_neutral_base, data = subjects))
```

```
## 
## Call:
## lm(formula = female ~ emotion_group_char_neutral_base, data = subjects)
## 
## Residuals:
##     Min      1Q  Median      3Q     Max
## -0.6562 -0.5932  0.3438  0.4068  0.4444
## 
## Coefficients:
##                                        Estimate Std. Error t value Pr(>|t|)
## (Intercept)                             0.55556    0.07356   7.553 1.69e-12 ***
## emotion_group_char_neutral_baseanger    0.06111    0.09731   0.628    0.531
## emotion_group_char_neutral_baseanxiety  0.03766    0.09766   0.386    0.700
## emotion_group_char_neutral_basereal     0.10069    0.11411   0.882    0.379
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
## 
## Residual standard error: 0.4934 on 192 degrees of freedom
## Multiple R-squared:  0.004444,   Adjusted R-squared:  -0.01111
## F-statistic: 0.2857 on 3 and 192 DF,  p-value: 0.8357
```

```
summary(lm(auth ~ emotion_group_char_neutral_base, data = subjects))
```

```
## 
## Call:
## lm(formula = auth ~ emotion_group_char_neutral_base, data = subjects)
```

```
##
## Residuals:
##     Min      1Q Median      3Q     Max
## -1.6017 -0.6017 -0.2667  0.5781  2.4667
##
## Coefficients:
##                                        Estimate Std. Error t value Pr(>|t|)
## (Intercept)                              1.2667     0.1513   8.374 1.15e-14 ***
## emotion_group_char_neutral_baseanger     0.2667     0.2001   1.333   0.1842
## emotion_group_char_neutral_baseanxiety   0.3350     0.2008   1.668   0.0969 .
## emotion_group_char_neutral_basereal      0.1552     0.2346   0.661   0.5091
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 1.015 on 192 degrees of freedom
## Multiple R-squared:  0.0159, Adjusted R-squared:  0.0005271
## F-statistic: 1.034 on 3 and 192 DF,  p-value: 0.3786
```

```r
summary(lm(age ~ emotion_group_char_neutral_base, data = subjects))
```

```
##
## Call:
## lm(formula = age ~ emotion_group_char_neutral_base, data = subjects)
##
## Residuals:
##     Min      1Q Median      3Q     Max
## -4.3556 -1.9322 -0.7167  1.0678 19.6444
##
## Coefficients:
##                                        Estimate Std. Error t value Pr(>|t|)
## (Intercept)                            23.35556    0.45839  50.951   <2e-16 ***
## emotion_group_char_neutral_baseanger   -0.63889    0.60639  -1.054    0.293
## emotion_group_char_neutral_baseanxiety -0.42335    0.60859  -0.696    0.488
## emotion_group_char_neutral_basereal    -0.01181    0.71106  -0.017    0.987
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 3.075 on 192 degrees of freedom
## Multiple R-squared:  0.007856,   Adjusted R-squared:  -0.007647
## F-statistic: 0.5067 on 3 and 192 DF,  p-value: 0.6781
```

```r
summary(lm(know_politician_schauspieler ~ emotion_group_char_neutral_base, data = subjects))
```

```
##
## Call:
## lm(formula = know_politician_schauspieler ~ emotion_group_char_neutral_base,
##     data = subjects)
##
## Residuals:
##     Min      1Q Median      3Q     Max
## -0.2000 -0.1667 -0.1667 -0.0678  1.9322
##
## Coefficients:
```

```
##                                          Estimate Std. Error t value Pr(>|t|)
## (Intercept)                               0.20000    0.06976   2.867   0.0047 **
## emotion_group_char_neutral_baseanger     -0.03333    0.09229  -0.361   0.7184
## emotion_group_char_neutral_baseanxiety   -0.13220    0.09262  -1.427   0.1554
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.468 on 161 degrees of freedom
##   (32 observations deleted due to missingness)
## Multiple R-squared:  0.01432,    Adjusted R-squared:  0.002074
## F-statistic: 1.169 on 2 and 161 DF,  p-value: 0.3132
```

Treatment Check

```
# Table: Opinion, Competence & Sympathy on Treatment Groups
summary(lm(opinion_schauspieler ~ emotion_group_char_neutral_base,
           data = subjects))
```

```
##
## Call:
## lm(formula = opinion_schauspieler ~ emotion_group_char_neutral_base,
##     data = subjects)
##
## Residuals:
##     Min      1Q  Median      3Q     Max
## -4.8947 -1.8947  0.1053  1.6923  4.2500
##
## Coefficients:
##                                          Estimate Std. Error t value Pr(>|t|)
## (Intercept)                                0.7500     0.3922   1.912  0.05857 .
## emotion_group_char_neutral_baseanger      -1.4423     0.5292  -2.725  0.00752 **
## emotion_group_char_neutral_baseanxiety    -0.8553     0.5324  -1.607  0.11114
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 2.219 on 106 degrees of freedom
##   (87 observations deleted due to missingness)
## Multiple R-squared:  0.06564,    Adjusted R-squared:  0.04801
## F-statistic: 3.723 on 2 and 106 DF,  p-value: 0.02737
```

```
summary(lm(competence_schauspieler ~ emotion_group_char_neutral_base,
           data = subjects))
```

```
##
## Call:
## lm(formula = competence_schauspieler ~ emotion_group_char_neutral_base,
##     data = subjects)
##
## Residuals:
##    Min     1Q Median     3Q    Max
## -4.940 -1.940  0.060  2.009  4.366
```

```
## 
## Coefficients:
##                                      Estimate Std. Error t value Pr(>|t|)
## (Intercept)                            0.6341     0.3752   1.690  0.09314 .
## emotion_group_char_neutral_baseanger  -1.4887     0.4956  -3.004  0.00315 **
## emotion_group_char_neutral_baseanxiety -0.6941    0.5061  -1.372  0.17236
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
## 
## Residual standard error: 2.402 on 143 degrees of freedom
##   (50 observations deleted due to missingness)
## Multiple R-squared:  0.06023,    Adjusted R-squared:  0.04709
## F-statistic: 4.583 on 2 and 143 DF,  p-value: 0.01178
```

```r
summary(lm(sympathy_schauspieler ~ emotion_group_char_neutral_base,
           data = subjects))
```

```
## 
## Call:
## lm(formula = sympathy_schauspieler ~ emotion_group_char_neutral_base,
##     data = subjects)
## 
## Residuals:
##     Min      1Q  Median      3Q     Max
## -4.6364 -1.5778 -0.2712  1.4808  5.7288
## 
## Coefficients:
##                                      Estimate Std. Error t value Pr(>|t|)
## (Intercept)                            0.6364     0.3520   1.808   0.0726 .
## emotion_group_char_neutral_baseanger  -2.3652     0.4651  -5.085 1.07e-06 ***
## emotion_group_char_neutral_baseanxiety -1.1171    0.4783  -2.336   0.0208 *
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
## 
## Residual standard error: 2.335 on 152 degrees of freedom
##   (41 observations deleted due to missingness)
## Multiple R-squared:  0.1471, Adjusted R-squared:  0.1359
## F-statistic: 13.11 on 2 and 152 DF,  p-value: 5.602e-06
```

Subjects' Emotions

```r
# Table: Emotion Self-Reports on Treatment Groups
# scale Means
summary(lm(aversion ~ emotion_group_char_neutral_base, data = subjects))
```

```
## 
## Call:
## lm(formula = aversion ~ emotion_group_char_neutral_base, data = subjects)
## 
## Residuals:
##     Min      1Q  Median      3Q     Max
```

```
## -0.3946 -0.1598  0.0210  0.1525  0.4929
##
## Coefficients:
##                                     Estimate Std. Error t value Pr(>|t|)
## (Intercept)                          0.39461    0.02997  13.168  < 2e-16 ***
## emotion_group_char_neutral_baseanger   -0.04712    0.03964  -1.189  0.23602
## emotion_group_char_neutral_baseanxiety -0.10660    0.03979  -2.679  0.00802 **
## emotion_group_char_neutral_basereal    -0.03461    0.04649  -0.745  0.45746
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.201 on 192 degrees of freedom
## Multiple R-squared:  0.03826,    Adjusted R-squared:  0.02323
## F-statistic: 2.546 on 3 and 192 DF,  p-value: 0.05731
```

```r
summary(lm(fear ~ emotion_group_char_neutral_base, data = subjects))
```

```
##
## Call:
## lm(formula = fear ~ emotion_group_char_neutral_base, data = subjects)
##
## Residuals:
##     Min      1Q  Median      3Q     Max
## -0.5186 -0.1407  0.0459  0.1516  0.4214
##
## Coefficients:
##                                     Estimate Std. Error t value Pr(>|t|)
## (Intercept)                          0.55956    0.03117  17.949   <2e-16 ***
## emotion_group_char_neutral_baseanger   -0.03433    0.04124  -0.833    0.406
## emotion_group_char_neutral_baseanxiety -0.02713    0.04139  -0.655    0.513
## emotion_group_char_neutral_basereal    -0.01383    0.04836  -0.286    0.775
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.2091 on 192 degrees of freedom
## Multiple R-squared:  0.004077,   Adjusted R-squared:  -0.01148
## F-statistic: 0.262 on 3 and 192 DF,  p-value: 0.8527
```

```r
summary(lm(enthusiasm ~ emotion_group_char_neutral_base, data = subjects))
```

```
##
## Call:
## lm(formula = enthusiasm ~ emotion_group_char_neutral_base, data = subjects)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -0.26719 -0.13459 -0.03571  0.11052  0.54052
##
## Coefficients:
##                                      Estimate Std. Error t value Pr(>|t|)
## (Intercept)                          0.256148   0.025809   9.925   <2e-16
## emotion_group_char_neutral_baseanger   -0.044204   0.034142  -1.295    0.197
## emotion_group_char_neutral_baseanxiety -0.009368   0.034266  -0.273    0.785
```

```
## emotion_group_char_neutral_basereal      0.041039   0.040035   1.025      0.307
##
## (Intercept)                                              ***
## emotion_group_char_neutral_baseanger
## emotion_group_char_neutral_baseanxiety
## emotion_group_char_neutral_basereal
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.1731 on 192 degrees of freedom
## Multiple R-squared:  0.02673,    Adjusted R-squared:  0.01152
## F-statistic: 1.758 on 3 and 192 DF,  p-value: 0.1567
```

```
# Scale Items
summary(lm(fear_aengstlich/100 ~ emotion_group_char_neutral_base,
           data = subjects))
```

```
##
## Call:
## lm(formula = fear_aengstlich/100 ~ emotion_group_char_neutral_base,
##     data = subjects)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -0.44222 -0.25487  0.09076  0.20483  0.49233
##
## Coefficients:
##                                          Estimate Std. Error t value Pr(>|t|)
## (Intercept)                              0.442222   0.040087  11.031   <2e-16
## emotion_group_char_neutral_baseanger    -0.004556   0.053031  -0.086    0.932
## emotion_group_char_neutral_baseanxiety  -0.007815   0.053223  -0.147    0.883
## emotion_group_char_neutral_basereal     -0.035972   0.062184  -0.578    0.564
##
## (Intercept)                              ***
## emotion_group_char_neutral_baseanger
## emotion_group_char_neutral_baseanxiety
## emotion_group_char_neutral_basereal
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.2689 on 192 degrees of freedom
## Multiple R-squared:  0.002021,   Adjusted R-squared:  -0.01357
## F-statistic: 0.1296 on 3 and 192 DF,  p-value: 0.9424
```

```
summary(lm(fear_besorgnis/100 ~ emotion_group_char_neutral_base,
           data = subjects))
```

```
##
## Call:
## lm(formula = fear_besorgnis/100 ~ emotion_group_char_neutral_base,
##     data = subjects)
##
## Residuals:
```

```
##      Min      1Q  Median      3Q     Max
## -0.57817 -0.08375  0.02527  0.13515  0.40183
##
## Coefficients:
##                                        Estimate Std. Error t value Pr(>|t|)
## (Intercept)                            0.647727   0.030932  20.940   <2e-16
## emotion_group_char_neutral_baseanger  -0.079561   0.040724  -1.954   0.0522
## emotion_group_char_neutral_baseanxiety -0.046003  0.041020  -1.121   0.2635
## emotion_group_char_neutral_basereal    0.006023   0.047670   0.126   0.8996
##
## (Intercept)                            ***
## emotion_group_char_neutral_baseanger   .
## emotion_group_char_neutral_baseanxiety
## emotion_group_char_neutral_basereal
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.2052 on 190 degrees of freedom
##   (2 observations deleted due to missingness)
## Multiple R-squared:  0.02828,    Adjusted R-squared:  0.01294
## F-statistic: 1.843 on 3 and 190 DF,  p-value: 0.1407
```

```r
summary(lm(fear_beunruhigung/100 ~ emotion_group_char_neutral_base,
           data = subjects))
```

```
##
## Call:
## lm(formula = fear_beunruhigung/100 ~ emotion_group_char_neutral_base,
##     data = subjects)
##
## Residuals:
##      Min      1Q  Median      3Q     Max
## -0.58378 -0.14167  0.03276  0.16083  0.44271
##
## Coefficients:
##                                        Estimate Std. Error t value Pr(>|t|)
## (Intercept)                             0.58378    0.03492  16.716   <2e-16 ***
## emotion_group_char_neutral_baseanger   -0.01394    0.04620  -0.302    0.763
## emotion_group_char_neutral_baseanxiety -0.02649    0.04637  -0.571    0.568
## emotion_group_char_neutral_basereal    -0.00659    0.05417  -0.122    0.903
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.2343 on 192 degrees of freedom
## Multiple R-squared:  0.001865,   Adjusted R-squared:  -0.01373
## F-statistic: 0.1196 on 3 and 192 DF,  p-value: 0.9485
```

```r
summary(lm(aversion_wut/100 ~ emotion_group_char_neutral_base,
           data = subjects))
```

```
##
## Call:
## lm(formula = aversion_wut/100 ~ emotion_group_char_neutral_base,
```

```
##     data = subjects)
##
## Residuals:
##      Min      1Q   Median      3Q      Max
## -0.47111 -0.22895  0.05889  0.19889  0.51322
##
## Coefficients:
##                                        Estimate Std. Error t value Pr(>|t|)
## (Intercept)                             0.47111    0.03680  12.801   <2e-16 ***
## emotion_group_char_neutral_baseanger   -0.07857    0.04886  -1.608   0.1095
## emotion_group_char_neutral_baseanxiety -0.12433    0.04886  -2.545   0.0117 *
## emotion_group_char_neutral_basereal    -0.03767    0.05709  -0.660   0.5101
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.2469 on 191 degrees of freedom
##   (1 observation deleted due to missingness)
## Multiple R-squared:  0.03573,    Adjusted R-squared:  0.02058
## F-statistic: 2.359 on 3 and 191 DF,  p-value: 0.07297
```

```r
summary(lm(aversion_hass/100 ~ emotion_group_char_neutral_base,
           data = subjects))
```

```
##
## Call:
## lm(formula = aversion_hass/100 ~ emotion_group_char_neutral_base,
##     data = subjects)
##
## Residuals:
##      Min      1Q   Median      3Q      Max
## -0.26822 -0.18424 -0.01493  0.14883  0.56178
##
## Coefficients:
##                                        Estimate Std. Error t value Pr(>|t|)
## (Intercept)                             0.26822    0.03179   8.436  7.8e-15 ***
## emotion_group_char_neutral_baseanger   -0.03456    0.04206  -0.822   0.4123
## emotion_group_char_neutral_baseanxiety -0.08398    0.04221  -1.990   0.0481 *
## emotion_group_char_neutral_basereal    -0.05260    0.04932  -1.066   0.2876
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.2133 on 192 degrees of freedom
## Multiple R-squared:  0.02119,    Adjusted R-squared:  0.005901
## F-statistic: 1.386 on 3 and 192 DF,  p-value: 0.2484
```

```r
summary(lm(aversion_zorn/100 ~ emotion_group_char_neutral_base,
           data = subjects))
```

```
##
## Call:
## lm(formula = aversion_zorn/100 ~ emotion_group_char_neutral_base,
##     data = subjects)
##
```

```
## Residuals:
##      Min      1Q   Median      3Q      Max
## -0.36667 -0.22949 -0.02632  0.22943  0.52333
##
## Coefficients:
##                                       Estimate Std. Error t value Pr(>|t|)
## (Intercept)                            0.36667    0.03648  10.051   <2e-16 ***
## emotion_group_char_neutral_baseanger  -0.06200    0.04826  -1.285   0.2004
## emotion_group_char_neutral_baseanxiety -0.11870   0.04843  -2.451   0.0151 *
## emotion_group_char_neutral_basereal   -0.04479    0.05659  -0.792   0.4296
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.2447 on 192 degrees of freedom
## Multiple R-squared:  0.03135,    Adjusted R-squared:  0.01622
## F-statistic: 2.071 on 3 and 192 DF,  p-value: 0.1054
```

```r
summary(lm(aversion_aufgebracht/100 ~ emotion_group_char_neutral_base,
          data = subjects))
```

```
##
## Call:
## lm(formula = aversion_aufgebracht/100 ~ emotion_group_char_neutral_base,
##     data = subjects)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -0.47244 -0.18305  0.08256  0.16094  0.54783
##
## Coefficients:
##                                        Estimate Std. Error t value Pr(>|t|)
## (Intercept)                            0.472444   0.036105  13.085   <2e-16
## emotion_group_char_neutral_baseanger  -0.020278   0.047762  -0.425   0.6716
## emotion_group_char_neutral_baseanxiety -0.099394  0.047935  -2.073   0.0395
## emotion_group_char_neutral_basereal   -0.003382   0.056006  -0.060   0.9519
##
## (Intercept)                           ***
## emotion_group_char_neutral_baseanger
## emotion_group_char_neutral_baseanxiety *
## emotion_group_char_neutral_basereal
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.2422 on 192 degrees of freedom
## Multiple R-squared:  0.02966,    Adjusted R-squared:  0.01449
## F-statistic: 1.956 on 3 and 192 DF,  p-value: 0.122
```

```r
summary(lm(enthusiasm_hoffnung/100 ~ emotion_group_char_neutral_base,
          data = subjects))
```

```
##
## Call:
## lm(formula = enthusiasm_hoffnung/100 ~ emotion_group_char_neutral_base,
```

```
##     data = subjects)
##
## Residuals:
##      Min      1Q   Median      3Q      Max
## -0.33219 -0.13701 -0.01369  0.11870  0.54678
##
## Coefficients:
##                                       Estimate Std. Error t value Pr(>|t|)
## (Intercept)                            0.30556    0.02864  10.669   <2e-16 ***
## emotion_group_char_neutral_baseanger  -0.06139    0.03789  -1.620    0.107
## emotion_group_char_neutral_baseanxiety -0.02234    0.03802  -0.587    0.558
## emotion_group_char_neutral_basereal    0.06663    0.04443   1.500    0.135
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.1921 on 192 degrees of freedom
## Multiple R-squared:  0.04778,    Adjusted R-squared:  0.03291
## F-statistic: 3.212 on 3 and 192 DF,  p-value: 0.02414
```

```r
summary(lm(enthusiasm_stolz/100 ~ emotion_group_char_neutral_base,
          data = subjects))
```

```
##
## Call:
## lm(formula = enthusiasm_stolz/100 ~ emotion_group_char_neutral_base,
##     data = subjects)
##
## Residuals:
##      Min      1Q   Median      3Q      Max
## -0.22625 -0.14967 -0.06333  0.12033  0.61667
##
## Coefficients:
##                                        Estimate Std. Error t value Pr(>|t|)
## (Intercept)                            0.203333   0.028829   7.053 3.08e-11
## emotion_group_char_neutral_baseanger  -0.053667   0.038137  -1.407    0.161
## emotion_group_char_neutral_baseanxiety -0.008418   0.038275  -0.220    0.826
## emotion_group_char_neutral_basereal    0.022917   0.044719   0.512    0.609
##
## (Intercept)                            ***
## emotion_group_char_neutral_baseanger
## emotion_group_char_neutral_baseanxiety
## emotion_group_char_neutral_basereal
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.1934 on 192 degrees of freedom
## Multiple R-squared:  0.02025,    Adjusted R-squared:  0.004937
## F-statistic: 1.323 on 3 and 192 DF,  p-value: 0.2683
```

```r
summary(lm(enthusiasm_enthusiastisch/100 ~ emotion_group_char_neutral_base,
          data = subjects))
```

```
##
```

```
## Call:
## lm(formula = enthusiasm_enthusiastisch/100 ~ emotion_group_char_neutral_base,
##     data = subjects)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -0.29313 -0.18228 -0.01634  0.13861  0.66044
##
## Coefficients:
##                                         Estimate Std. Error t value Pr(>|t|)
## (Intercept)                             0.259556   0.031929   8.129 5.21e-14
## emotion_group_char_neutral_baseanger   -0.017556   0.042238  -0.416    0.678
## emotion_group_char_neutral_baseanxiety  0.002648   0.042391   0.062    0.950
## emotion_group_char_neutral_basereal     0.033569   0.049528   0.678    0.499
##
## (Intercept)                             ***
## emotion_group_char_neutral_baseanger
## emotion_group_char_neutral_baseanxiety
## emotion_group_char_neutral_basereal
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.2142 on 192 degrees of freedom
## Multiple R-squared:  0.006184,   Adjusted R-squared:  -0.009345
## F-statistic: 0.3982 on 3 and 192 DF,  p-value: 0.7544
```

```
# Table: Facial Expressions on Treatment Groups : see above:
# Emotion Self-Reports by Treatment Group
```

Response Times (Model B.1)

```
# this loads the model; if you wish to run it: change the filename
rsp_times_treatment_brm <- brm(
  response_time ~ question_order_2 + (1|question_type) + (1|emotion_group_char),
  data = subjects_rsp,
  family = shifted_lognormal(),
  control = list(adapt_delta = 0.99),
  file = paste0(base_folder, "rsp_times_brm"))

summary(rsp_times_treatment_brm)
```

```
##  Family: shifted_lognormal
##   Links: mu = identity; sigma = identity; ndt = identity
## Formula: response_time ~ question_order_2 + (1 | question_type) + (1 | emotion_group_char)
##    Data: subjects_rsp (Number of observations: 1175)
## Samples: 4 chains, each with iter = 2000; warmup = 1000; thin = 1;
##          total post-warmup samples = 4000
##
## Group-Level Effects:
## ~emotion_group_char (Number of levels: 4)
##                 Estimate Est.Error l-95% CI u-95% CI Rhat Bulk_ESS Tail_ESS
```

```
## sd(Intercept)      0.05        0.09      0.00      0.20 1.00       982      1374
##
## ~question_type (Number of levels: 6)
##              Estimate Est.Error l-95% CI u-95% CI Rhat Bulk_ESS Tail_ESS
## sd(Intercept)      0.41        0.19      0.20      0.91 1.00       890      1509
##
## Population-Level Effects:
##                 Estimate Est.Error l-95% CI u-95% CI Rhat Bulk_ESS Tail_ESS
## Intercept           3.25      0.19      2.87      3.67 1.00      1048      1144
## question_order_2   -0.00      0.01     -0.02      0.01 1.00      4025      2745
##
## Family Specific Parameters:
##        Estimate Est.Error l-95% CI u-95% CI Rhat Bulk_ESS Tail_ESS
## sigma      0.38      0.01      0.36      0.40 1.00      3035      2420
## ndt        0.35      0.30      0.01      1.11 1.00      2131      1715
##
## Samples were drawn using sampling(NUTS). For each parameter, Bulk_ESS
## and Tail_ESS are effective sample size measures, and Rhat is the potential
## scale reduction factor on split chains (at convergence, Rhat = 1).
```

```r
#plot(rsp_times_treatment_brm)
rm(rsp_times_treatment_brm)
```

Political Attitude

```r
# Table: Post Treatment Feeling Thermometer and Left-Right Self-Placement Scores
# on Treatment Groups

# post treatment feeling thermometer ~ treatment group
# only those with feeling thermometer after the treatment
summary(lm(feel_cdu ~ emotion_group_char_neutral_base,
        data = subjects[subjects$feeling_first==0,]))
```

```
##
## Call:
## lm(formula = feel_cdu ~ emotion_group_char_neutral_base, data = subjects[subjects$feeling_first ==
##     0, ])
##
## Residuals:
##     Min      1Q  Median      3Q     Max
## -5.3824 -2.1538  0.6176  1.8661  4.6923
##
## Coefficients:
##                                        Estimate Std. Error t value Pr(>|t|)
## (Intercept)                             -0.6923     0.4875  -1.420    0.159
## emotion_group_char_neutral_baseanger     0.7664     0.6830   1.122    0.265
## emotion_group_char_neutral_baseanxiety   1.0747     0.6476   1.660    0.100
## emotion_group_char_neutral_basereal     -0.1538     0.8443  -0.182    0.856
##
## Residual standard error: 2.486 on 96 degrees of freedom
##    (3 observations deleted due to missingness)
```

```
## Multiple R-squared:  0.04033,    Adjusted R-squared:  0.01034
## F-statistic: 1.345 on 3 and 96 DF,  p-value: 0.2644
```

```r
summary(lm(feel_csu ~ emotion_group_char_neutral_base,
           data = subjects[subjects$feeling_first==0,]))
```

```
##
## Call:
## lm(formula = feel_csu ~ emotion_group_char_neutral_base, data = subjects[subjects$feeling_first ==
##     0, ])
##
## Residuals:
##    Min     1Q Median     3Q    Max
## -3.556 -1.720 -0.720  2.417  5.467
##
## Coefficients:
##                                        Estimate Std. Error t value Pr(>|t|)
## (Intercept)                            -2.28000    0.52908  -4.309 4.17e-05 ***
## emotion_group_char_neutral_baseanger    0.83556    0.73425   1.138    0.258
## emotion_group_char_neutral_baseanxiety  0.81333    0.71638   1.135    0.259
## emotion_group_char_neutral_basereal    -0.05333    0.92904  -0.057    0.954
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 2.645 on 90 degrees of freedom
##   (9 observations deleted due to missingness)
## Multiple R-squared:  0.02463,    Adjusted R-squared:  -0.007882
## F-statistic: 0.7576 on 3 and 90 DF,  p-value: 0.5208
```

```r
summary(lm(feel_afd ~ emotion_group_char_neutral_base,
           data = subjects[subjects$feeling_first==0,]))
```

```
##
## Call:
## lm(formula = feel_afd ~ emotion_group_char_neutral_base, data = subjects[subjects$feeling_first ==
##     0, ])
##
## Residuals:
##     Min      1Q  Median      3Q     Max
## -0.6765 -0.6765 -0.2222 -0.0714  5.3235
##
## Coefficients:
##                                        Estimate Std. Error t value Pr(>|t|)
## (Intercept)                            -4.34615    0.22609 -19.223   <2e-16 ***
## emotion_group_char_neutral_baseanger   -0.43162    0.31677  -1.363    0.176
## emotion_group_char_neutral_baseanxiety  0.02262    0.30035   0.075    0.940
## emotion_group_char_neutral_basereal    -0.58242    0.38217  -1.524    0.131
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 1.153 on 97 degrees of freedom
##   (2 observations deleted due to missingness)
## Multiple R-squared:  0.04594,    Adjusted R-squared:  0.01643
## F-statistic: 1.557 on 3 and 97 DF,  p-value: 0.2048
```

```
summary(lm(feel_spd ~ emotion_group_char_neutral_base,
           data = subjects[subjects$feeling_first==0,]))
```

```
##
## Call:
## lm(formula = feel_spd ~ emotion_group_char_neutral_base, data = subjects[subjects$feeling_first ==
##     0, ])
##
## Residuals:
##     Min      1Q  Median      3Q     Max
## -5.5769 -1.8125  0.4808  1.5096  4.5385
##
## Coefficients:
##                                     Estimate Std. Error t value Pr(>|t|)
## (Intercept)                           0.5769     0.4325   1.334    0.185
## emotion_group_char_neutral_baseanger -0.1325     0.6059  -0.219    0.827
## emotion_group_char_neutral_baseanxiety 0.2356    0.5822   0.405    0.687
## emotion_group_char_neutral_basereal   -0.1154     0.7491  -0.154    0.878
##
## Residual standard error: 2.205 on 94 degrees of freedom
##   (5 observations deleted due to missingness)
## Multiple R-squared:  0.005138,   Adjusted R-squared:  -0.02661
## F-statistic: 0.1618 on 3 and 94 DF,  p-value: 0.9218
```

```
summary(lm(feel_gruene ~ emotion_group_char_neutral_base,
           data = subjects[subjects$feeling_first==0,]))
```

```
##
## Call:
## lm(formula = feel_gruene ~ emotion_group_char_neutral_base, data = subjects[subjects$feeling_first ==
##     0, ])
##
## Residuals:
##    Min     1Q Median     3Q    Max
## -7.154 -1.016  0.879  1.846  2.912
##
## Coefficients:
##                                     Estimate Std. Error t value Pr(>|t|)
## (Intercept)                          2.15385    0.50539   4.262 4.67e-05 ***
## emotion_group_char_neutral_baseanger 0.47578    0.70809   0.672    0.503
## emotion_group_char_neutral_baseanxiety -0.06561  0.67138  -0.098    0.922
## emotion_group_char_neutral_basereal  -0.35385    0.83556  -0.423    0.673
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 2.577 on 98 degrees of freedom
##   (1 observation deleted due to missingness)
## Multiple R-squared:  0.01193,    Adjusted R-squared:  -0.01831
## F-statistic: 0.3945 on 3 and 98 DF,  p-value: 0.7572
```

```
summary(lm(feel_linke ~ emotion_group_char_neutral_base,
           data = subjects[subjects$feeling_first==0,]))
```

```
##
## Call:
## lm(formula = feel_linke ~ emotion_group_char_neutral_base, data = subjects[subjects$feeling_first ==
##     0, ])
##
## Residuals:
##     Min     1Q Median     3Q    Max
## -5.080 -1.997  0.920  2.031  5.080
##
## Coefficients:
##                                        Estimate Std. Error t value Pr(>|t|)
## (Intercept)                              0.0800     0.5392   0.148    0.882
## emotion_group_char_neutral_baseanger    -0.1600     0.7625  -0.210    0.834
## emotion_group_char_neutral_baseanxiety  -0.1113     0.7196  -0.155    0.877
## emotion_group_char_neutral_basereal     -1.0800     0.8999  -1.200    0.233
##
## Residual standard error: 2.696 on 92 degrees of freedom
##   (7 observations deleted due to missingness)
## Multiple R-squared:  0.01764,    Adjusted R-squared:  -0.01439
## F-statistic: 0.5507 on 3 and 92 DF,  p-value: 0.6489
```

```r
# Post Treatment - Left- Right
# only those with left-right after the treatment
summary(lm(left_right ~ emotion_group_char_neutral_base,
           data = subjects[subjects$feeling_first==1,]))
```

```
##
## Call:
## lm(formula = left_right ~ emotion_group_char_neutral_base, data = subjects[subjects$feeling_first ==
##     1, ])
##
## Residuals:
##      Min      1Q  Median      3Q     Max
## -3.8333 -0.8824 -0.1176  1.2292  4.1176
##
## Coefficients:
##                                        Estimate Std. Error t value Pr(>|t|)
## (Intercept)                              5.1176     0.4272  11.978   <2e-16 ***
## emotion_group_char_neutral_baseanger    -0.3676     0.5287  -0.695    0.489
## emotion_group_char_neutral_baseanxiety  -0.2843     0.5584  -0.509    0.612
## emotion_group_char_neutral_basereal     -0.2353     0.6042  -0.389    0.698
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 1.762 on 86 degrees of freedom
##   (3 observations deleted due to missingness)
## Multiple R-squared:  0.005727,   Adjusted R-squared:  -0.02896
## F-statistic: 0.1651 on 3 and 86 DF,  p-value: 0.9196
```

```r
summary(lm(left_right_dist ~ emotion_group_char_neutral_base,
           data = subjects[subjects$feeling_first==1,]))
```

```
##
```

```
## Call:
## lm(formula = left_right_dist ~ emotion_group_char_neutral_base,
##     data = subjects[subjects$feeling_first == 1, ])
##
## Residuals:
##     Min      1Q  Median      3Q     Max
## -1.6471 -0.6471 -0.2500  0.7500  2.5833
##
## Coefficients:
##                                          Estimate Std. Error t value Pr(>|t|)
## (Intercept)                               1.29412    0.25791   5.018 2.79e-06 ***
## emotion_group_char_neutral_baseanger     -0.04412    0.31914  -0.138    0.890
## emotion_group_char_neutral_baseanxiety    0.12255    0.33709   0.364    0.717
## emotion_group_char_neutral_basereal       0.35294    0.36473   0.968    0.336
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 1.063 on 86 degrees of freedom
##   (3 observations deleted due to missingness)
## Multiple R-squared:  0.01927,    Adjusted R-squared:  -0.01494
## F-statistic: 0.5632 on 3 and 86 DF,  p-value: 0.6408
```

```
# Table: Populism, Elitism & Pluralism on Treatment Groups

# Populism
summary(lm(pop ~ emotion_group_char_neutral_base, data = subjects))
```

```
##
## Call:
## lm(formula = pop ~ emotion_group_char_neutral_base, data = subjects)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -1.54774 -0.32917  0.00417  0.26083  1.76083
##
## Coefficients:
##                                          Estimate Std. Error t value Pr(>|t|)
## (Intercept)                               3.09370    0.08133  38.038   <2e-16 ***
## emotion_group_char_neutral_baseanger      0.14546    0.10759   1.352    0.178
## emotion_group_char_neutral_baseanxiety    0.05404    0.10798   0.500    0.617
## emotion_group_char_neutral_basereal      -0.09787    0.12616  -0.776    0.439
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.5456 on 192 degrees of freedom
## Multiple R-squared:  0.02315,    Adjusted R-squared:  0.007891
## F-statistic: 1.517 on 3 and 192 DF,  p-value: 0.2114
```

```
summary(lm(pop_buergerwillen ~ emotion_group_char_neutral_base,
        data = subjects))
```

```
##
## Call:
```

```
## lm(formula = pop_buergerwillen ~ emotion_group_char_neutral_base,
##     data = subjects)
##
## Residuals:
##     Min      1Q  Median      3Q     Max
## -1.98333 -0.90698  0.06780  0.09302  1.09302
##
## Coefficients:
##                                         Estimate Std. Error t value Pr(>|t|)
## (Intercept)                              3.90698    0.11880  32.887   <2e-16 ***
## emotion_group_char_neutral_baseanger     0.07636    0.15566   0.491    0.624
## emotion_group_char_neutral_baseanxiety   0.02523    0.15620   0.161    0.872
## emotion_group_char_neutral_basereal      0.06177    0.18188   0.340    0.734
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.779 on 190 degrees of freedom
##   (2 observations deleted due to missingness)
## Multiple R-squared:  0.001522,   Adjusted R-squared:  -0.01424
## F-statistic: 0.09652 on 3 and 190 DF,  p-value: 0.9619
```

```r
summary(lm(pop_entscheidungen ~ emotion_group_char_neutral_base,
           data = subjects))
```

```
##
## Call:
## lm(formula = pop_entscheidungen ~ emotion_group_char_neutral_base,
##     data = subjects)
##
## Residuals:
##     Min      1Q  Median      3Q     Max
## -1.8444 -0.7333  0.1556  0.4062  2.4062
##
## Coefficients:
##                                         Estimate Std. Error t value Pr(>|t|)
## (Intercept)                               2.8444     0.1581  17.987   <2e-16 ***
## emotion_group_char_neutral_baseanger     -0.1111     0.2092  -0.531    0.596
## emotion_group_char_neutral_baseanxiety   -0.1203     0.2107  -0.571    0.569
## emotion_group_char_neutral_basereal      -0.2507     0.2453  -1.022    0.308
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 1.061 on 191 degrees of freedom
##   (1 observation deleted due to missingness)
## Multiple R-squared:  0.005478,   Adjusted R-squared:  -0.01014
## F-statistic: 0.3507 on 3 and 191 DF,  p-value: 0.7887
```

```r
summary(lm(pop_unterschiede ~ emotion_group_char_neutral_base, data = subjects))
```

```
##
## Call:
## lm(formula = pop_unterschiede ~ emotion_group_char_neutral_base,
##     data = subjects)
```

```
##
## Residuals:
##     Min      1Q  Median      3Q     Max
## -2.6087 -0.5102  0.3913  0.6122  1.7436
##
## Coefficients:
##                                       Estimate Std. Error t value Pr(>|t|)
## (Intercept)                             3.2564     0.1685  19.323   <2e-16 ***
## emotion_group_char_neutral_baseanger    0.2538     0.2258   1.124    0.263
## emotion_group_char_neutral_baseanxiety  0.1313     0.2258   0.582    0.562
## emotion_group_char_neutral_basereal     0.3523     0.2767   1.273    0.205
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 1.052 on 156 degrees of freedom
##   (36 observations deleted due to missingness)
## Multiple R-squared:  0.01318,    Adjusted R-squared:  -0.005795
## F-statistic: 0.6947 on 3 and 156 DF,  p-value: 0.5566
```

```
summary(lm(pop_buergervertreter ~ emotion_group_char_neutral_base,
          data = subjects))
```

```
##
## Call:
## lm(formula = pop_buergervertreter ~ emotion_group_char_neutral_base,
##     data = subjects)
##
## Residuals:
##     Min      1Q  Median      3Q     Max
## -1.5593 -0.5593 -0.2143  0.7111  2.7857
##
## Coefficients:
##                                       Estimate Std. Error t value Pr(>|t|)
## (Intercept)                             2.2889     0.1497  15.287   <2e-16 ***
## emotion_group_char_neutral_baseanger    0.2704     0.1988   1.360   0.1754
## emotion_group_char_neutral_baseanxiety -0.0746     0.2011  -0.371   0.7111
## emotion_group_char_neutral_basereal    -0.4370     0.2445  -1.787   0.0755 .
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 1.004 on 183 degrees of freedom
##   (9 observations deleted due to missingness)
## Multiple R-squared:  0.05033,    Adjusted R-squared:  0.03476
## F-statistic: 3.233 on 3 and 183 DF,  p-value: 0.0236
```

```
summary(lm(pop_reden ~ emotion_group_char_neutral_base, data = subjects))
```

```
##
## Call:
## lm(formula = pop_reden ~ emotion_group_char_neutral_base, data = subjects)
##
## Residuals:
##     Min      1Q  Median      3Q     Max
```

```
## -3.00000 -0.66667  0.01724  1.00000  1.33333
##
## Coefficients:
##                                     Estimate Std. Error t value Pr(>|t|)
## (Intercept)                           3.8444     0.1378  27.894   <2e-16 ***
## emotion_group_char_neutral_baseanger  0.1556     0.1823   0.853    0.395
## emotion_group_char_neutral_baseanxiety 0.1383    0.1837   0.753    0.452
## emotion_group_char_neutral_basereal   -0.1778     0.2179  -0.816    0.416
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.9246 on 189 degrees of freedom
##   (3 observations deleted due to missingness)
## Multiple R-squared:  0.0168, Adjusted R-squared:  0.001194
## F-statistic: 1.077 on 3 and 189 DF,  p-value: 0.3603
```

```r
summary(lm(pop_kompromiss ~ emotion_group_char_neutral_base, data = subjects))
```

```
##
## Call:
## lm(formula = pop_kompromiss ~ emotion_group_char_neutral_base,
##     data = subjects)
##
## Residuals:
##     Min      1Q  Median      3Q     Max
## -1.5965 -0.5965 -0.1000  0.6098  2.6098
##
## Coefficients:
##                                     Estimate Std. Error t value Pr(>|t|)
## (Intercept)                           2.3902     0.1689  14.151   <2e-16 ***
## emotion_group_char_neutral_baseanger  0.1947     0.2249   0.865    0.388
## emotion_group_char_neutral_baseanxiety 0.2062    0.2215   0.931    0.353
## emotion_group_char_neutral_basereal   -0.2902     0.2598  -1.117    0.266
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 1.082 on 177 degrees of freedom
##   (15 observations deleted due to missingness)
## Multiple R-squared:  0.02804,    Adjusted R-squared:  0.01157
## F-statistic: 1.702 on 3 and 177 DF,  p-value: 0.1683
```

```r
# Elitism
summary(lm(eli ~ emotion_group_char_neutral_base, data = subjects))
```

```
##
## Call:
## lm(formula = eli ~ emotion_group_char_neutral_base, data = subjects)
##
## Residuals:
##     Min      1Q  Median      3Q     Max
## -1.3944 -0.3944 -0.0599  0.4308  1.6808
##
## Coefficients:
```

```
##                                         Estimate Std. Error t value Pr(>|t|)
## (Intercept)                              2.39444    0.09146  26.182   <2e-16 ***
## emotion_group_char_neutral_baseanger     0.05833    0.12098   0.482    0.630
## emotion_group_char_neutral_baseanxiety  -0.07524    0.12142  -0.620    0.536
## emotion_group_char_neutral_basereal     -0.08455    0.14187  -0.596    0.552
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.6135 on 192 degrees of freedom
## Multiple R-squared:  0.009581,   Adjusted R-squared:  -0.005894
## F-statistic: 0.6191 on 3 and 192 DF,  p-value: 0.6034
```

`summary(lm(eli_anfuehren ~ emotion_group_char_neutral_base, data = subjects))`

```
##
## Call:
## lm(formula = eli_anfuehren ~ emotion_group_char_neutral_base,
##     data = subjects)
##
## Residuals:
##     Min      1Q  Median      3Q     Max
## -1.3898 -0.3898 -0.3111  0.6667  2.6889
##
## Coefficients:
##                                         Estimate Std. Error t value Pr(>|t|)
## (Intercept)                              2.31111    0.14296  16.166   <2e-16 ***
## emotion_group_char_neutral_baseanger     0.07872    0.18980   0.415    0.679
## emotion_group_char_neutral_baseanxiety   0.02222    0.19124   0.116    0.908
## emotion_group_char_neutral_basereal     -0.09236    0.22176  -0.416    0.678
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.959 on 189 degrees of freedom
##   (3 observations deleted due to missingness)
## Multiple R-squared:  0.003563,   Adjusted R-squared:  -0.01225
## F-statistic: 0.2253 on 3 and 189 DF,  p-value: 0.8788
```

`summary(lm(eli_unternehmer ~ emotion_group_char_neutral_base, data = subjects))`

```
##
## Call:
## lm(formula = eli_unternehmer ~ emotion_group_char_neutral_base,
##     data = subjects)
##
## Residuals:
##     Min      1Q  Median      3Q     Max
## -0.6610 -0.6222 -0.3125  0.3778  3.3778
##
## Coefficients:
##                                         Estimate Std. Error t value Pr(>|t|)
## (Intercept)                              1.62222    0.11361  14.279   <2e-16 ***
## emotion_group_char_neutral_baseanger    -0.17222    0.15030  -1.146   0.2533
## emotion_group_char_neutral_baseanxiety   0.03879    0.15084   0.257   0.7973
```

```
## emotion_group_char_neutral_basereal    -0.30972    0.17624  -1.757    0.0804 .
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.7621 on 192 degrees of freedom
## Multiple R-squared:  0.02868,    Adjusted R-squared:  0.01351
## F-statistic:  1.89 on 3 and 192 DF,  p-value: 0.1327
```

```
summary(lm(eli_experten ~ emotion_group_char_neutral_base, data = subjects))
```

```
##
## Call:
## lm(formula = eli_experten ~ emotion_group_char_neutral_base,
##     data = subjects)
##
## Residuals:
##     Min      1Q  Median      3Q     Max
## -2.6000 -0.6000  0.4000  0.7895  1.7895
##
## Coefficients:
##                                          Estimate Std. Error t value Pr(>|t|)
## (Intercept)                               3.37209    0.17783  18.963   <2e-16 ***
## emotion_group_char_neutral_baseanger      0.22791    0.23299   0.978    0.329
## emotion_group_char_neutral_baseanxiety   -0.16157    0.23554  -0.686    0.494
## emotion_group_char_neutral_basereal       0.03416    0.27224   0.125    0.900
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 1.166 on 188 degrees of freedom
##   (4 observations deleted due to missingness)
## Multiple R-squared:  0.01723,    Adjusted R-squared:  0.001544
## F-statistic: 1.098 on 3 and 188 DF,  p-value: 0.3511
```

```
summary(lm(eli_kampf ~ emotion_group_char_neutral_base, data = subjects))
```

```
##
## Call:
## lm(formula = eli_kampf ~ emotion_group_char_neutral_base, data = subjects)
##
## Residuals:
##     Min      1Q  Median      3Q     Max
## -1.3518 -1.1403 -0.2667  0.7333  2.8596
##
## Coefficients:
##                                          Estimate Std. Error t value Pr(>|t|)
## (Intercept)                               2.28205    0.18184  12.550   <2e-16 ***
## emotion_group_char_neutral_baseanger      0.06980    0.23863   0.293    0.770
## emotion_group_char_neutral_baseanxiety   -0.14170    0.23598  -0.600    0.549
## emotion_group_char_neutral_basereal      -0.01538    0.27577  -0.056    0.956
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 1.136 on 176 degrees of freedom
```

```
##   (16 observations deleted due to missingness)
## Multiple R-squared:  0.005645,   Adjusted R-squared:  -0.0113
## F-statistic: 0.333 on 3 and 176 DF,  p-value: 0.8015
```

```r
# Pluralism
summary(lm(plu ~ emotion_group_char_neutral_base, data = subjects))
```

```
##
## Call:
## lm(formula = plu ~ emotion_group_char_neutral_base, data = subjects)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -1.65625 -0.15625 -0.04237  0.36667  0.45763
##
## Coefficients:
##                                       Estimate Std. Error t value Pr(>|t|)
## (Intercept)                            4.60000    0.07344  62.638   <2e-16 ***
## emotion_group_char_neutral_baseanger   0.03333    0.09715   0.343    0.732
## emotion_group_char_neutral_baseanxiety -0.05763    0.09750  -0.591    0.555
## emotion_group_char_neutral_basereal    0.05625    0.11392   0.494    0.622
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.4926 on 192 degrees of freedom
## Multiple R-squared:  0.007731,   Adjusted R-squared:  -0.007773
## F-statistic: 0.4986 on 3 and 192 DF,  p-value: 0.6837
```

```r
summary(lm(plu_kompromiss ~ emotion_group_char_neutral_base, data = subjects))
```

```
##
## Call:
## lm(formula = plu_kompromiss ~ emotion_group_char_neutral_base,
##     data = subjects)
##
## Residuals:
##     Min      1Q  Median      3Q     Max
## -2.4833 -0.4444  0.5167  0.5556  0.6780
##
## Coefficients:
##                                        Estimate Std. Error t value Pr(>|t|)
## (Intercept)                            4.444444   0.115295  38.548   <2e-16
## emotion_group_char_neutral_baseanger   0.038889   0.152521   0.255    0.799
## emotion_group_char_neutral_baseanxiety -0.122411   0.153074  -0.800    0.425
## emotion_group_char_neutral_basereal    -0.006944   0.178847  -0.039    0.969
##
## (Intercept)                            ***
## emotion_group_char_neutral_baseanger
## emotion_group_char_neutral_baseanxiety
## emotion_group_char_neutral_basereal
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
```

```
## Residual standard error: 0.7734 on 192 degrees of freedom
## Multiple R-squared:  0.007287,   Adjusted R-squared:  -0.008224
## F-statistic: 0.4698 on 3 and 192 DF,  p-value: 0.7037
```

```r
summary(lm(plu_meinungen ~ emotion_group_char_neutral_base, data = subjects))
```

```
##
## Call:
## lm(formula = plu_meinungen ~ emotion_group_char_neutral_base,
##     data = subjects)
##
## Residuals:
##     Min      1Q  Median      3Q     Max
## -1.8750  0.1250  0.2167  0.2373  0.2444
##
## Coefficients:
##                                      Estimate Std. Error t value Pr(>|t|)
## (Intercept)                          4.755556   0.068611  69.312   <2e-16 ***
## emotion_group_char_neutral_baseanger   0.027778   0.090764   0.306    0.760
## emotion_group_char_neutral_baseanxiety 0.007156   0.091093   0.079    0.937
## emotion_group_char_neutral_basereal    0.119444   0.106430   1.122    0.263
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.4603 on 192 degrees of freedom
## Multiple R-squared:  0.00799,    Adjusted R-squared:  -0.00751
## F-statistic: 0.5155 on 3 and 192 DF,  p-value: 0.6721
```

```r
# Table: Elitism & Pluralism on Response Time

# Scale Means
summary(lm(eli ~ response_time_mean + auth + female, data = subjects))
```

```
##
## Call:
## lm(formula = eli ~ response_time_mean + auth + female, data = subjects)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -1.40656 -0.44290 -0.03051  0.43353  1.65747
##
## Coefficients:
##                    Estimate Std. Error t value Pr(>|t|)
## (Intercept)        2.662908   0.192438  13.838   <2e-16 ***
## response_time_mean -0.010391   0.005271  -1.971   0.0501 .
## auth                0.061455   0.043161   1.424   0.1561
## female             -0.134188   0.090910  -1.476   0.1416
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.6039 on 192 degrees of freedom
## Multiple R-squared:  0.04042,    Adjusted R-squared:  0.02543
## F-statistic: 2.696 on 3 and 192 DF,  p-value: 0.04722
```

```r
summary(lm(plu ~ response_time_mean + auth + female, data = subjects))
```

```
##
## Call:
## lm(formula = plu ~ response_time_mean + auth + female, data = subjects)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -1.63802 -0.17190  0.01168  0.37792  0.51613
##
## Coefficients:
##                     Estimate Std. Error t value Pr(>|t|)
## (Intercept)         4.414504   0.156416  28.223   <2e-16 ***
## response_time_mean  0.004531   0.004284   1.058    0.291
## auth               -0.004821   0.035081  -0.137    0.891
## female              0.108251   0.073893   1.465    0.145
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.4908 on 192 degrees of freedom
## Multiple R-squared:  0.01496,    Adjusted R-squared:  -0.0004322
## F-statistic: 0.9719 on 3 and 192 DF,  p-value: 0.4071
```

```r
# Scale Items
summary(lm(eli_anfuehren ~ response_time_mean + auth  + female,
           data = subjects))
```

```
##
## Call:
## lm(formula = eli_anfuehren ~ response_time_mean + auth + female,
##     data = subjects)
##
## Residuals:
##     Min      1Q  Median      3Q     Max
## -1.6687 -0.5499 -0.1724  0.7181  2.5478
##
## Coefficients:
##                     Estimate Std. Error t value Pr(>|t|)
## (Intercept)         2.831742   0.304663   9.295   <2e-16 ***
## response_time_mean -0.017224   0.008376  -2.056   0.0411 *
## auth                0.070643   0.067606   1.045   0.2974
## female             -0.199355   0.143255  -1.392   0.1657
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.9435 on 189 degrees of freedom
##   (3 observations deleted due to missingness)
## Multiple R-squared:  0.03555,    Adjusted R-squared:  0.02024
## F-statistic: 2.322 on 3 and 189 DF,  p-value: 0.07652
```

```r
summary(lm(eli_unternehmer ~ response_time_mean + auth  + female,
           data = subjects))
```

```
##
## Call:
## lm(formula = eli_unternehmer ~ response_time_mean + auth + female,
##     data = subjects)
##
## Residuals:
##     Min      1Q  Median      3Q     Max
## -0.7497 -0.5457 -0.4125  0.4646  3.5691
##
## Coefficients:
##                    Estimate Std. Error t value Pr(>|t|)
## (Intercept)        1.353699   0.243697   5.555 9.18e-08 ***
## response_time_mean 0.003872   0.006674   0.580    0.563
## auth               0.086400   0.054657   1.581    0.116
## female            -0.101519   0.115126  -0.882    0.379
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.7647 on 192 degrees of freedom
## Multiple R-squared:  0.02206,    Adjusted R-squared:  0.006782
## F-statistic: 1.444 on 3 and 192 DF,  p-value: 0.2314
```

```r
summary(lm(eli_experten ~ response_time_mean + auth  + female, data = subjects))
```

```
##
## Call:
## lm(formula = eli_experten ~ response_time_mean + auth + female,
##     data = subjects)
##
## Residuals:
##     Min      1Q  Median      3Q     Max
## -2.7418 -0.6974  0.3756  0.7143  1.8743
##
## Coefficients:
##                    Estimate Std. Error t value Pr(>|t|)
## (Intercept)         3.94935    0.37293  10.590   <2e-16 ***
## response_time_mean -0.01270    0.01020  -1.245    0.215
## auth               -0.01269    0.08440  -0.150    0.881
## female             -0.27434    0.17742  -1.546    0.124
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 1.166 on 188 degrees of freedom
##   (4 observations deleted due to missingness)
## Multiple R-squared:  0.01741,    Adjusted R-squared:  0.001732
## F-statistic:  1.11 on 3 and 188 DF,  p-value: 0.3461
```

```r
summary(lm(eli_kampf ~ response_time_mean + auth  + female, data = subjects))
```

```
##
## Call:
## lm(formula = eli_kampf ~ response_time_mean + auth + female,
##     data = subjects)
```

```
## 
## Residuals:
##     Min      1Q  Median      3Q     Max
## -1.7225 -1.0788 -0.2388  0.7782  2.9748
## 
## Coefficients:
##                    Estimate Std. Error t value Pr(>|t|)
## (Intercept)         2.46894    0.37384   6.604 4.56e-10 ***
## response_time_mean -0.01525    0.01021  -1.494    0.137
## auth                0.13326    0.08300   1.605    0.110
## female              0.03320    0.17705   0.188    0.851
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
## 
## Residual standard error: 1.122 on 176 degrees of freedom
##   (16 observations deleted due to missingness)
## Multiple R-squared:  0.02865,    Adjusted R-squared:  0.01209
## F-statistic:  1.73 on 3 and 176 DF,  p-value: 0.1625
```

```r
summary(lm(plu_kompromiss ~ response_time_mean + auth + female,
          data = subjects))
```

```
## 
## Call:
## lm(formula = plu_kompromiss ~ response_time_mean + auth + female,
##     data = subjects)
## 
## Residuals:
##     Min      1Q  Median      3Q     Max
## -2.5543 -0.4326  0.4671  0.5848  0.8320
## 
## Coefficients:
##                    Estimate Std. Error t value Pr(>|t|)
## (Intercept)        4.024478   0.245523  16.391   <2e-16 ***
## response_time_mean 0.008786   0.006724   1.307    0.193
## auth               0.039867   0.055067   0.724    0.470
## female             0.139613   0.115988   1.204    0.230
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
## 
## Residual standard error: 0.7705 on 192 degrees of freedom
## Multiple R-squared:  0.01488,    Adjusted R-squared:  -0.0005126
## F-statistic: 0.9667 on 3 and 192 DF,  p-value: 0.4096
```

```r
summary(lm(plu_meinungen ~ response_time_mean + auth+ female, data = subjects))
```

```
## 
## Call:
## lm(formula = plu_meinungen ~ response_time_mean + auth + female,
##     data = subjects)
## 
## Residuals:
##     Min      1Q  Median      3Q     Max
```

```
## -1.8392   0.1111   0.1855   0.2393   0.3799
##
## Coefficients:
##                      Estimate Std. Error t value Pr(>|t|)
## (Intercept)         4.8045291  0.1456781  32.980   <2e-16 ***
## response_time_mean  0.0002763  0.0039899   0.069    0.945
## auth               -0.0495088  0.0326731  -1.515    0.131
## female              0.0768894  0.0688204   1.117    0.265
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.4571 on 192 degrees of freedom
## Multiple R-squared:  0.02137,    Adjusted R-squared:  0.006076
## F-statistic: 1.397 on 3 and 192 DF,  p-value: 0.2449
```

Table: Elitism & Pluralism on Emotion Self-Reports

Scale Means
```
summary(lm(eli ~ aversion + fear + enthusiasm + auth + female, data = subjects))
```

```
##
## Call:
## lm(formula = eli ~ aversion + fear + enthusiasm + auth + female,
##     data = subjects)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -1.66303 -0.42564  0.03536  0.39854  1.57797
##
## Coefficients:
##             Estimate Std. Error t value Pr(>|t|)
## (Intercept)  2.14036    0.15666  13.662   <2e-16 ***
## aversion     0.27140    0.24221   1.121    0.264
## fear         0.02243    0.24518   0.091    0.927
## enthusiasm   0.41379    0.25067   1.651    0.100
## auth         0.07045    0.04331   1.627    0.105
## female      -0.12524    0.09335  -1.342    0.181
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.6061 on 190 degrees of freedom
## Multiple R-squared:  0.04339,    Adjusted R-squared:  0.01822
## F-statistic: 1.724 on 5 and 190 DF,  p-value: 0.131
```

```
summary(lm(plu ~ aversion + fear + enthusiasm + auth + female, data = subjects))
```

```
##
## Call:
## lm(formula = plu ~ aversion + fear + enthusiasm + auth + female,
##     data = subjects)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
```

```
## -1.5186 -0.2074  0.1195  0.3640  0.6440
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)  4.844804   0.122901  39.420  < 2e-16 ***
## aversion    -0.532696   0.190010  -2.804  0.00558 **
## fear        -0.229101   0.192341  -1.191  0.23509
## enthusiasm   0.002459   0.196653   0.013  0.99004
## auth        -0.013510   0.033977  -0.398  0.69135
## female       0.136816   0.073231   1.868  0.06326 .
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.4755 on 190 degrees of freedom
## Multiple R-squared:  0.08522,    Adjusted R-squared:  0.06115
## F-statistic:  3.54 on 5 and 190 DF,  p-value: 0.004394
```

```r
# Scale Items
summary(lm(eli ~ aversion + fear + enthusiasm + auth + female, data = subjects))
```

```
##
## Call:
## lm(formula = eli ~ aversion + fear + enthusiasm + auth + female,
##     data = subjects)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -1.66303 -0.42564  0.03536  0.39854  1.57797
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)  2.14036    0.15666  13.662   <2e-16 ***
## aversion     0.27140    0.24221   1.121    0.264
## fear         0.02243    0.24518   0.091    0.927
## enthusiasm   0.41379    0.25067   1.651    0.100
## auth         0.07045    0.04331   1.627    0.105
## female      -0.12524    0.09335  -1.342    0.181
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.6061 on 190 degrees of freedom
## Multiple R-squared:  0.04339,    Adjusted R-squared:  0.01822
## F-statistic: 1.724 on 5 and 190 DF,  p-value: 0.131
```

```r
summary(lm(eli_anfuehren ~ aversion + fear + enthusiasm + auth + female,
           data = subjects))
```

```
##
## Call:
## lm(formula = eli_anfuehren ~ aversion + fear + enthusiasm + auth +
##     female, data = subjects)
##
## Residuals:
```

```
##      Min      1Q  Median      3Q     Max
## -1.7486 -0.4988 -0.1533  0.6878  2.7789
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)   2.00137    0.24582   8.142 5.37e-14 ***
## aversion      0.07601    0.38328   0.198   0.8430
## fear          0.13945    0.38818   0.359   0.7198
## enthusiasm    0.86904    0.39815   2.183   0.0303 *
## auth          0.08248    0.06777   1.217   0.2251
## female       -0.18584    0.14701  -1.264   0.2078
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.9463 on 187 degrees of freedom
##   (3 observations deleted due to missingness)
## Multiple R-squared:  0.04006,    Adjusted R-squared:  0.01439
## F-statistic: 1.561 on 5 and 187 DF,  p-value: 0.1732
```

```r
summary(lm(eli_unternehmer ~ aversion + fear + enthusiasm + auth + female,
           data = subjects))
```

```
##
## Call:
## lm(formula = eli_unternehmer ~ aversion + fear + enthusiasm +
##     auth + female, data = subjects)
##
## Residuals:
##      Min      1Q  Median      3Q     Max
## -0.9587 -0.5397 -0.3262  0.4637  3.0617
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)   1.64127    0.19513   8.411 9.54e-15 ***
## aversion     -0.41591    0.30167  -1.379    0.170
## fear         -0.28438    0.30537  -0.931    0.353
## enthusiasm    0.47783    0.31222   1.530    0.128
## auth          0.08036    0.05394   1.490    0.138
## female       -0.08527    0.11627  -0.733    0.464
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.7549 on 190 degrees of freedom
## Multiple R-squared:  0.05691,    Adjusted R-squared:  0.03209
## F-statistic: 2.293 on 5 and 190 DF,  p-value: 0.0472
```

```r
summary(lm(eli_experten ~ aversion + fear + enthusiasm + auth + female,
           data = subjects))
```

```
##
## Call:
## lm(formula = eli_experten ~ aversion + fear + enthusiasm + auth +
##     female, data = subjects)
```

```
## 
## Residuals:
##     Min      1Q  Median      3Q     Max
## -2.7664 -0.6391  0.2767  0.7489  1.8716
## 
## Coefficients:
##             Estimate Std. Error t value Pr(>|t|)
## (Intercept)  3.379235   0.302060  11.187   <2e-16 ***
## aversion     0.782734   0.468093   1.672   0.0962 .
## fear         0.049070   0.476852   0.103   0.9181
## enthusiasm  -0.520665   0.496799  -1.048   0.2960
## auth         0.003992   0.084266   0.047   0.9623
## female      -0.250510   0.182108  -1.376   0.1706
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
## 
## Residual standard error: 1.163 on 186 degrees of freedom
##   (4 observations deleted due to missingness)
## Multiple R-squared:  0.03347,    Adjusted R-squared:  0.007485
## F-statistic: 1.288 on 5 and 186 DF,  p-value: 0.2708
```

```r
summary(lm(eli_kampf ~ aversion + fear + enthusiasm + auth + female,
          data = subjects))
```

```
## 
## Call:
## lm(formula = eli_kampf ~ aversion + fear + enthusiasm + auth +
##     female, data = subjects)
## 
## Residuals:
##     Min      1Q  Median      3Q     Max
## -1.9082 -0.9078 -0.2434  0.7578  2.9763
## 
## Coefficients:
##             Estimate Std. Error t value Pr(>|t|)
## (Intercept)  1.427568   0.298290   4.786 3.62e-06 ***
## aversion     0.558472   0.477542   1.169   0.2438
## fear         0.494957   0.478087   1.035   0.3020
## enthusiasm   0.633998   0.476407   1.331   0.1850
## auth         0.146911   0.082481   1.781   0.0766 .
## female      -0.005494   0.178665  -0.031   0.9755
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
## 
## Residual standard error: 1.115 on 174 degrees of freedom
##   (16 observations deleted due to missingness)
## Multiple R-squared:  0.05154,    Adjusted R-squared:  0.02429
## F-statistic: 1.891 on 5 and 174 DF,  p-value: 0.09816
```

```r
summary(lm(plu_kompromiss ~ aversion + fear + enthusiasm + auth + female,
          data = subjects))
```

```
## 
```

```
## Call:
## lm(formula = plu_kompromiss ~ aversion + fear + enthusiasm +
##     auth + female, data = subjects)
##
## Residuals:
##     Min      1Q  Median      3Q     Max
## -2.7205 -0.4056  0.3353  0.5928  0.9236
##
## Coefficients:
##             Estimate Std. Error t value Pr(>|t|)
## (Intercept)  4.66531    0.19645  23.748   <2e-16 ***
## aversion    -0.67940    0.30372  -2.237   0.0265 *
## fear        -0.21080    0.30745  -0.686   0.4938
## enthusiasm  -0.15691    0.31434  -0.499   0.6182
## auth         0.02732    0.05431   0.503   0.6156
## female       0.16221    0.11706   1.386   0.1675
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.7601 on 190 degrees of freedom
## Multiple R-squared:  0.05129,    Adjusted R-squared:  0.02633
## F-statistic: 2.055 on 5 and 190 DF,  p-value: 0.07292
```

```r
summary(lm(plu_meinungen ~ aversion + fear + enthusiasm + auth + female,
          data = subjects))
```

```
##
## Call:
## lm(formula = plu_meinungen ~ aversion + fear + enthusiasm + auth +
##     female, data = subjects)
##
## Residuals:
##       Min       1Q   Median       3Q      Max
## -1.72122  0.00212  0.16208  0.25555  0.50100
##
## Coefficients:
##             Estimate Std. Error t value Pr(>|t|)
## (Intercept)  5.02430    0.11500  43.691   <2e-16 ***
## aversion    -0.38599    0.17779  -2.171   0.0312 *
## fear        -0.24741    0.17997  -1.375   0.1708
## enthusiasm   0.16183    0.18401   0.879   0.3802
## auth        -0.05434    0.03179  -1.709   0.0891 .
## female       0.11143    0.06852   1.626   0.1056
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.4449 on 190 degrees of freedom
## Multiple R-squared:  0.08269,    Adjusted R-squared:  0.05855
## F-statistic: 3.425 on 5 and 190 DF,  p-value: 0.005492
```