Surprise study pilot 11

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Study description

In this pilot we screened people for high social anxiety. The task itself, is the same as pilot 10 (re-introducing the video). During the screening, we selected people scoring 6 or higher for mini in pilot 11, but when we collected this information again during the testing session, some people scored lower than 6 (5 or 6 people out of 28). We will also add 14 people from pilot 10 who scored high on mini-spin reaching a total sample of 42. This is the task version used for this pilot: https://app.gorilla.sc/admin/task/698788/editor?version=6

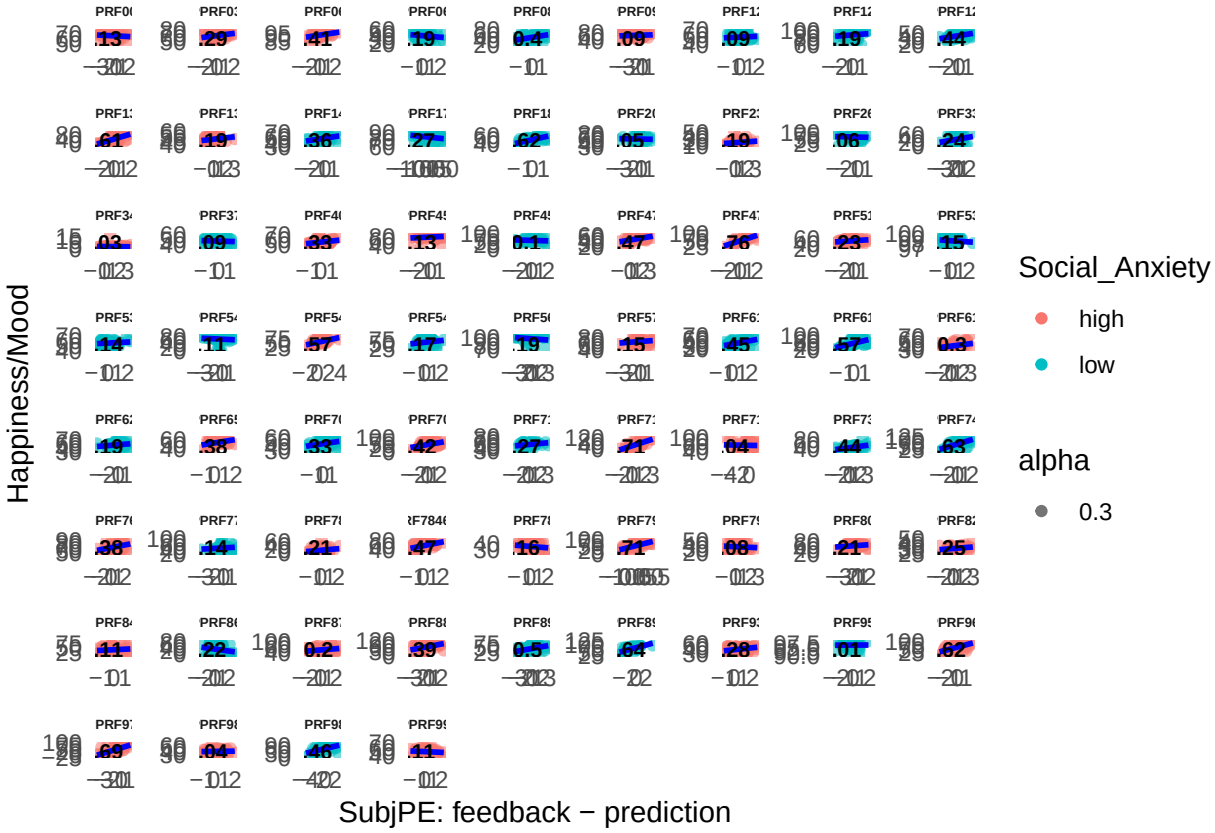
QUESTION: which mini-spin score shall we use in the analysis for people who scored lower than 6 the second time?

Relationship Mood and SubjPE

When looking at pilot 11 alone (people with high social anxiety) the correlation is 0.32 (n = 28), when adding the 14 people with high social anxiety from pilot 10, the correlation becomes 0.28 (n = 42). When adding the remaining people from pilot 10 with low social anxiety, the group correlation becomes 0.24 (n = 67).

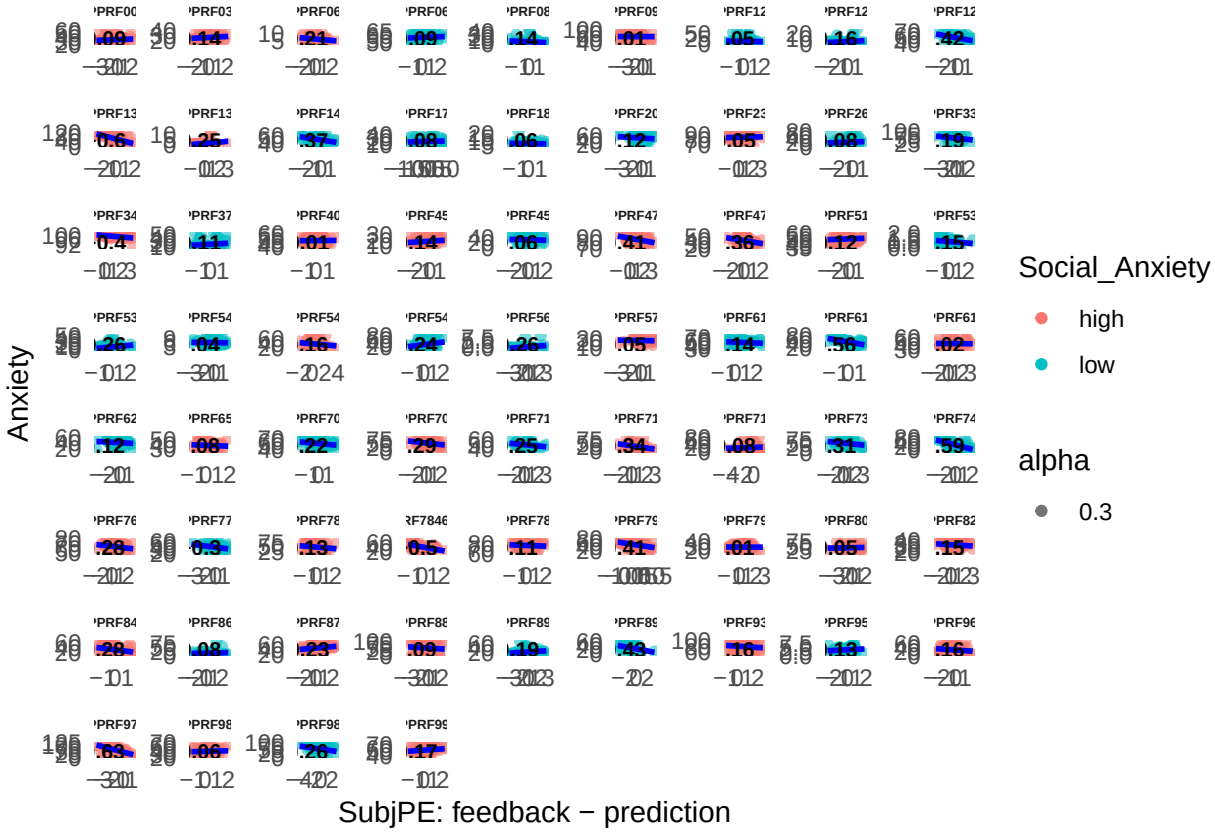
```
##   pilot_nr length(unique(Random_ID))
## 1 Pilot 11                         28
## 2 Pilot 10                         39
```

```
## [1] "average correlation between Mood and SubjPE: 0.24052169717836"
```



Relationship Anxiety and SubjPE

```
## [1] "average correlation between Mood and SubjPE: -0.112364418164298"
```



LME models for Mood and SubjPE

This is the best model: Mood ~ SubjPE * mini_SPIN_total + (SubjPE | Random_ID)

```
## Data: df_all_vid
## Models:
## model1: Mood ~ SubjPE + (1 | Random_ID)
## model2: Mood ~ SubjPE + (SubjPE | Random_ID)
##        npar   AIC   BIC logLik deviance  Chisq Df Pr(>Chisq)
## model1    4 26876 26900 -13434    26868
## model2    6 26556 26592 -13272    26544 324.03  2  < 2.2e-16 ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
## [1] 26873.11
```

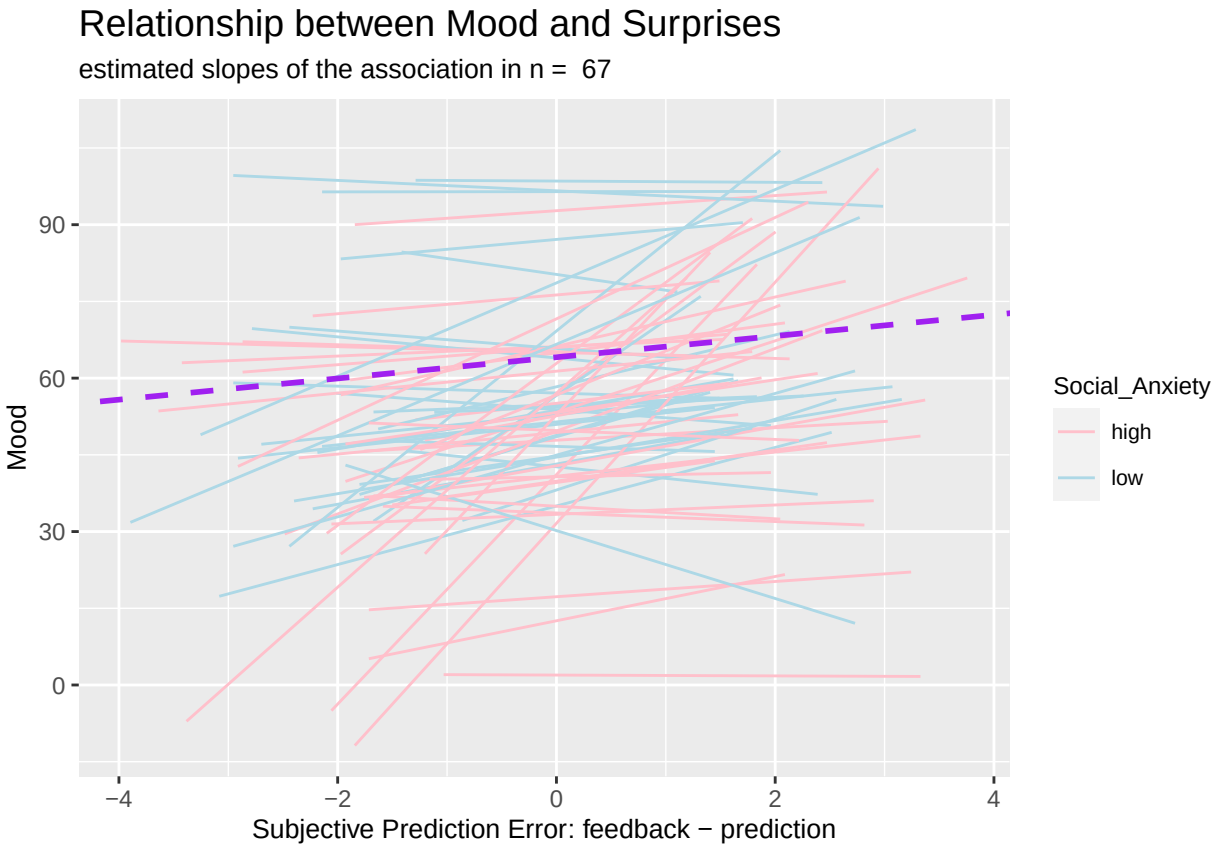
```
## [1] 26551.09
```

```
## Data: df_all_vid
## Models:
## model2: Mood ~ SubjPE + (SubjPE | Random_ID)
## model3: Mood ~ SubjPE * mini_SPIN_total + (SubjPE | Random_ID)
##        npar   AIC   BIC logLik deviance  Chisq Df Pr(>Chisq)
## model2    6 26556 26592 -13272    26544
## model3    8 26551 26599 -13267    26535 9.1992  2    0.01006 *
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
## [1] 26546.33
```

```
## # A tibble: 4 x 5
##   effect term                  estimate std.error statistic
##   <chr>  <chr>                    <dbl>     <dbl>     <dbl>
## 1 fixed  (Intercept)              64.1       4.43      14.5
## 2 fixed  SubjPE                   2.07      1.58       1.32
## 3 fixed  mini_SPIN_total         -1.63      0.622     -2.62
## 4 fixed  SubjPE:mini_SPIN_total   0.349     0.221      1.58
```

Individual plots with LME for Mood



LME models for Anxiety and SubjPE

This is the best model: Anxiety ~ SubjPE * mini_SPIN_total + (SubjPE | Random_ID)

```
## Data: df_all_vid
## Models:
## model1: Anxiety ~ SubjPE + (1 | Random_ID)
## model2: Anxiety ~ SubjPE + (SubjPE | Random_ID)
##        npar   AIC   BIC logLik deviance  Chisq Df Pr(>Chisq)
## model1    4 26834 26858 -13413    26826
## model2    6 26706 26742 -13347    26694 132.54  2  < 2.2e-16 ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

## Data: df_all_vid
## Models:
## model2: Anxiety ~ SubjPE + (SubjPE | Random_ID)
## model3: Anxiety ~ SubjPE * mini_SPIN_total + (SubjPE | Random_ID)
##        npar   AIC   BIC logLik deviance  Chisq Df Pr(>Chisq)
## model2    6 26706 26742 -13347    26694
## model3    8 26695 26743 -13339    26679 15.031  2  0.0005446 ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

## Linear mixed model fit by REML ['lmerMod']
## Formula: Anxiety ~ SubjPE * mini_SPIN_total + (SubjPE | Random_ID)
##    Data: df_all_vid
## Control: lmerControl(optimizer = "bobyqa")
##
## REML criterion at convergence: 26674.9
##
## Scaled residuals:
##     Min      1Q  Median      3Q     Max
## -4.5339 -0.4766 -0.0463  0.3746  5.5091
##
## Random effects:
##  Groups    Name        Variance Std.Dev. Corr
##  Random_ID (Intercept) 407.74   20.193
##            SubjPE       17.36    4.166   -0.23
##  Residual              207.13   14.392
## Number of obs: 3216, groups:  Random_ID, 67
##
## Fixed effects:
##                         Estimate Std. Error t value
## (Intercept)              19.7781     5.0854   3.889
## SubjPE                   -1.2561     1.1907  -1.055
## mini_SPIN_total           2.8908     0.7152   4.042
## SubjPE:mini_SPIN_total   -0.1338     0.1661  -0.806
##
## Correlation of Fixed Effects:
##             (Intr) SubjPE m_SPIN
## SubjPE      -0.199
## mn_SPIN_ttl -0.873  0.175
## SbPE:_SPIN_  0.177 -0.874 -0.205
```

```
## # A tibble: 4 x 5
##   effect term                  estimate std.error statistic
##   <chr>  <chr>                    <dbl>     <dbl>     <dbl>
## 1 fixed  (Intercept)              19.8       5.09      3.89
## 2 fixed  SubjPE                  -1.26      1.19     -1.05
## 3 fixed  mini_SPIN_total          2.89      0.715     4.04
## 4 fixed  SubjPE:mini_SPIN_total  -0.134     0.166    -0.806
```

Individual plots with LME for Anxiety