Surprise study pilot 11

Marjan Biria

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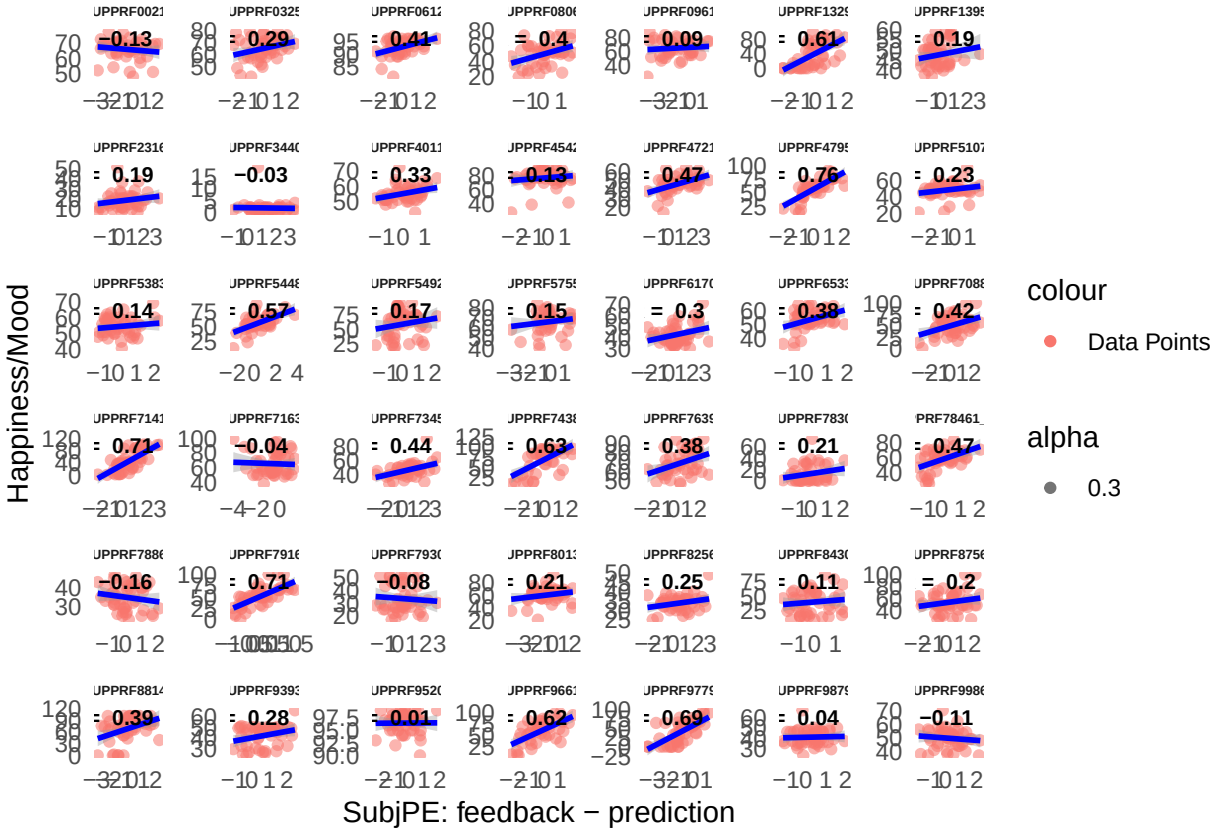
Study description

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?

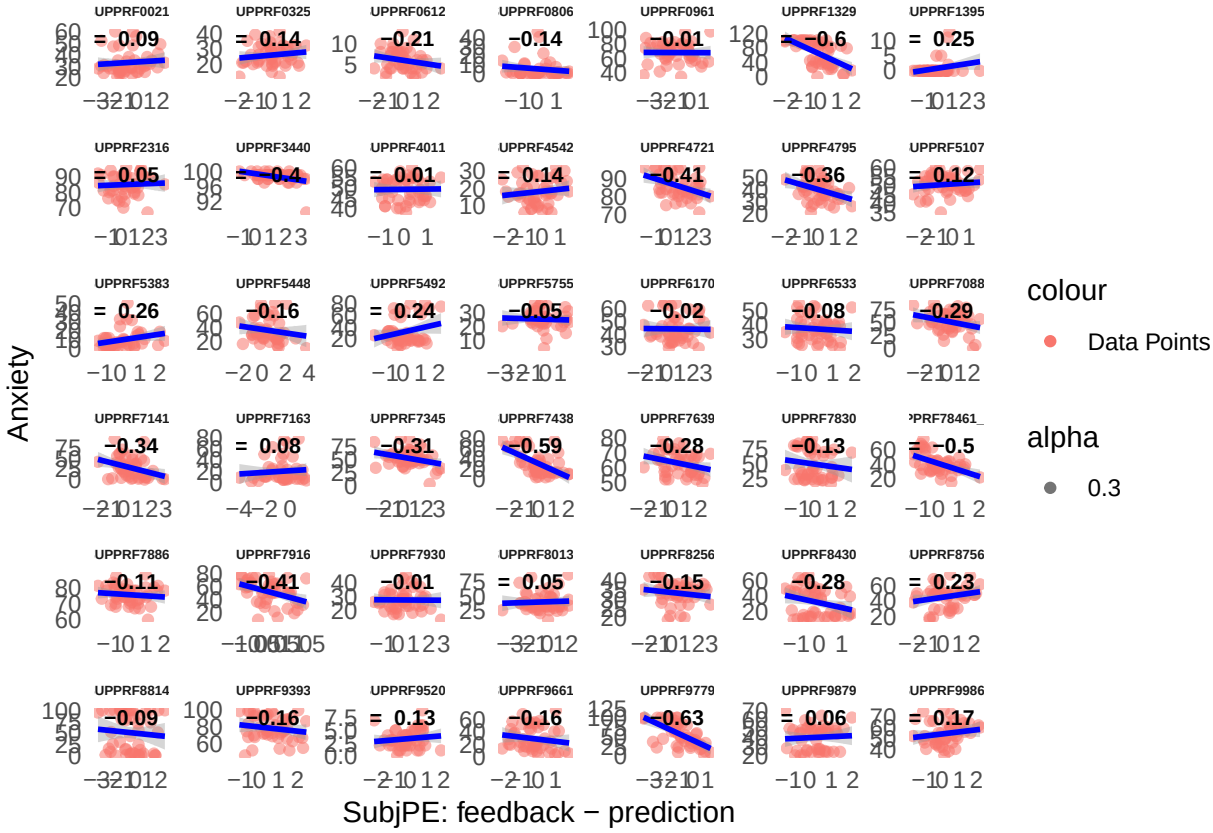
Relationship Mood and SubjPE

```
## [1] "average correlation between Mood and SubjPE: 0.287137638914281"
```



Relationship Anxiety and SubjPE

```
## [1] "average correlation between Mood and SubjPE: -0.115330594288477"
```



LME models for Mood and SubjPE

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

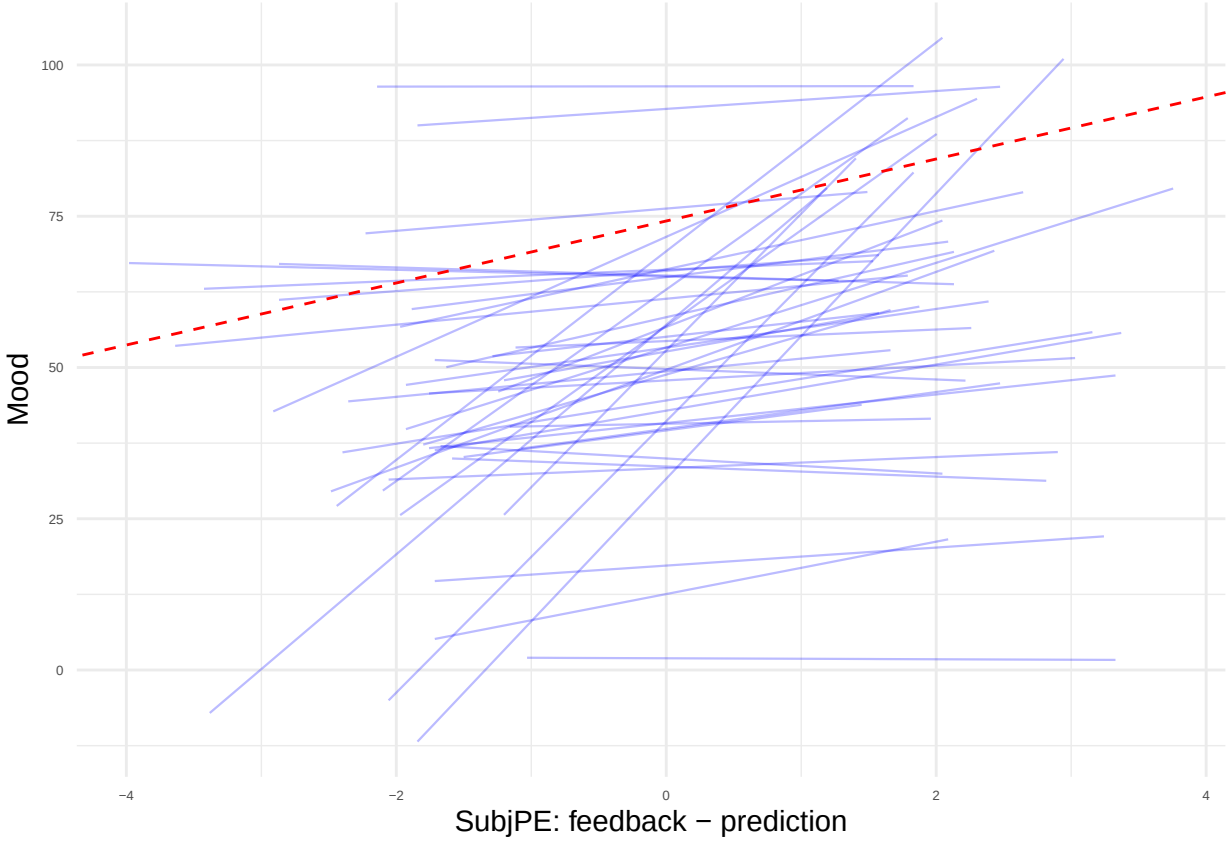
```
## Data: pilot_11
## Models:
## model1: Mood ~ SubjPE + (1 | Random_ID)
## model2: Mood ~ SubjPE + (SubjPE | Random_ID)
##        npar   AIC   BIC  logLik deviance  Chisq Df Pr(>Chisq)
## model1    4 16865 16888 -8428.6    16857
## model2    6 16607 16640 -8297.3    16595 262.47  2  < 2.2e-16 ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

## Data: pilot_11
## 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 16607 16640 -8297.3    16595
## model3    8 16604 16648 -8293.8    16588 7.0919  2    0.02884 *
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

## Linear mixed model fit by REML ['lmerMod']
## Formula: Mood ~ SubjPE * mini_SPIN_total + (SubjPE | Random_ID)
##    Data: pilot_11
## Control: lmerControl(optimizer = "bobyqa")
##
## REML criterion at convergence: 16580
##
## Scaled residuals:
##     Min      1Q  Median      3Q     Max
## -4.6338 -0.4588  0.0050  0.4594  4.5396
##
## Random effects:
##  Groups    Name        Variance Std.Dev. Corr
##  Random_ID (Intercept) 288.63   16.989
##            SubjPE       44.82    6.695   0.04
##  Residual              191.07   13.823
## Number of obs: 2016, groups:  Random_ID, 42
##
## Fixed effects:
##                         Estimate Std. Error t value
## (Intercept)             74.21016    8.69838   8.531
## SubjPE                   5.12368    3.58427   1.429
## mini_SPIN_total         -2.72439    1.00633  -2.707
## SubjPE:mini_SPIN_total  0.03419    0.41341   0.083
##
## Correlation of Fixed Effects:
##             (Intr) SubjPE m_SPIN
## SubjPE       0.032
## mn_SPIN_ttl -0.953 -0.029
## SbPE:_SPIN_ -0.029 -0.953  0.030
```

```
## # A tibble: 4 x 5
##   effect term                  estimate std.error statistic
##   <chr>  <chr>                    <dbl>     <dbl>     <dbl>
## 1 fixed  (Intercept)             74.2        8.70     8.53
## 2 fixed  SubjPE                   5.12       3.58     1.43
## 3 fixed  mini_SPIN_total         -2.72       1.01    -2.71
## 4 fixed  SubjPE:mini_SPIN_total   0.0342     0.413    0.0827
```

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: pilot_11
## Models:
## model1: Anxiety ~ SubjPE + (1 | Random_ID)
## model2: Anxiety ~ SubjPE + (SubjPE | Random_ID)
##        npar   AIC   BIC  logLik deviance  Chisq Df Pr(>Chisq)
## model1    4 17060 17082 -8525.8    17052
## model2    6 16952 16985 -8469.9    16940 111.95  2  < 2.2e-16 ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

## Data: pilot_11
## 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 16952 16985 -8469.9    16940
## model3    8 16944 16989 -8464.0    16928 11.682  2   0.002905 **
## ---
## 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: pilot_11
## Control: lmerControl(optimizer = "bobyqa")
##
## REML criterion at convergence: 16920.7
##
## Scaled residuals:
##     Min      1Q  Median      3Q     Max
## -4.3117 -0.4720 -0.0581  0.3842  4.3859
##
## Random effects:
##  Groups    Name        Variance Std.Dev. Corr
##  Random_ID (Intercept) 404.9    20.12
##            SubjPE       25.5     5.05    -0.13
##  Residual              228.6    15.12
## Number of obs: 2016, groups:  Random_ID, 42
##
## Fixed effects:
##                         Estimate Std. Error t value
## (Intercept)              6.6751    10.2900   0.649
## SubjPE                  -1.5552     2.8457  -0.547
## mini_SPIN_total          4.2613     1.1904   3.580
## SubjPE:mini_SPIN_total  -0.1039     0.3274  -0.317
##
## Correlation of Fixed Effects:
##             (Intr) SubjPE m_SPIN
## SubjPE      -0.120
## mn_SPIN_ttl -0.953  0.115
## SbPE:_SPIN_  0.116 -0.953 -0.123
```

```
## # A tibble: 4 x 5
##   effect term                  estimate std.error statistic
##   <chr>  <chr>                    <dbl>     <dbl>     <dbl>
## 1 fixed  (Intercept)               6.68     10.3       0.649
## 2 fixed  SubjPE                   -1.56      2.85     -0.547
## 3 fixed  mini_SPIN_total           4.26      1.19      3.58
## 4 fixed  SubjPE:mini_SPIN_total   -0.104     0.327    -0.317
```

Individual plots with LME for Anxiety