Attention pilot 1

Marjan Biria

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Study description

In this pilot we tested people on the attention pilot, where no feedback was provided and no prediction was collected. We have m_hist, anxiety, mood and certainty ratings for this pilot. This is the experiment on Gorilla: https://app.gorilla.sc/admin/project/115369 This is the task version used: https://app.gorilla.sc/admin/task/712861/editor?version=3
The Externally focused attention condition was presented first, followed by the internally focused attention. Each condition had 24 trials. I will keep the mood and anxiety ratings before they start the task to look at baseline anxiety and mood in the following analysis.

Anxiety and Mood ratings within subjects

There were 3 people that had given the same rating across all trials. Some people show the pattern we expect (lower anxiety, higher mood from IN to OUT conditions) but not everyone.

QUESTION: How can we best plot the group plot? We cannot plot the individual points anymore, as they would become hard to read; we could average within subjects but again not sure if this is the best approach? I also wonder maybe the fact that there was no feedback (per trial, only at the end) was not stressful enough. It would be interesting to pilot it with the feedback and prediction.
Let's also think how to have the feedback across both conditions: we do want to keep feedback constant to be comparable between conditions, right? If so, we would need to have 2 x 48 trials?

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## [1] "21 subjects out of 29 had high social anxiety"
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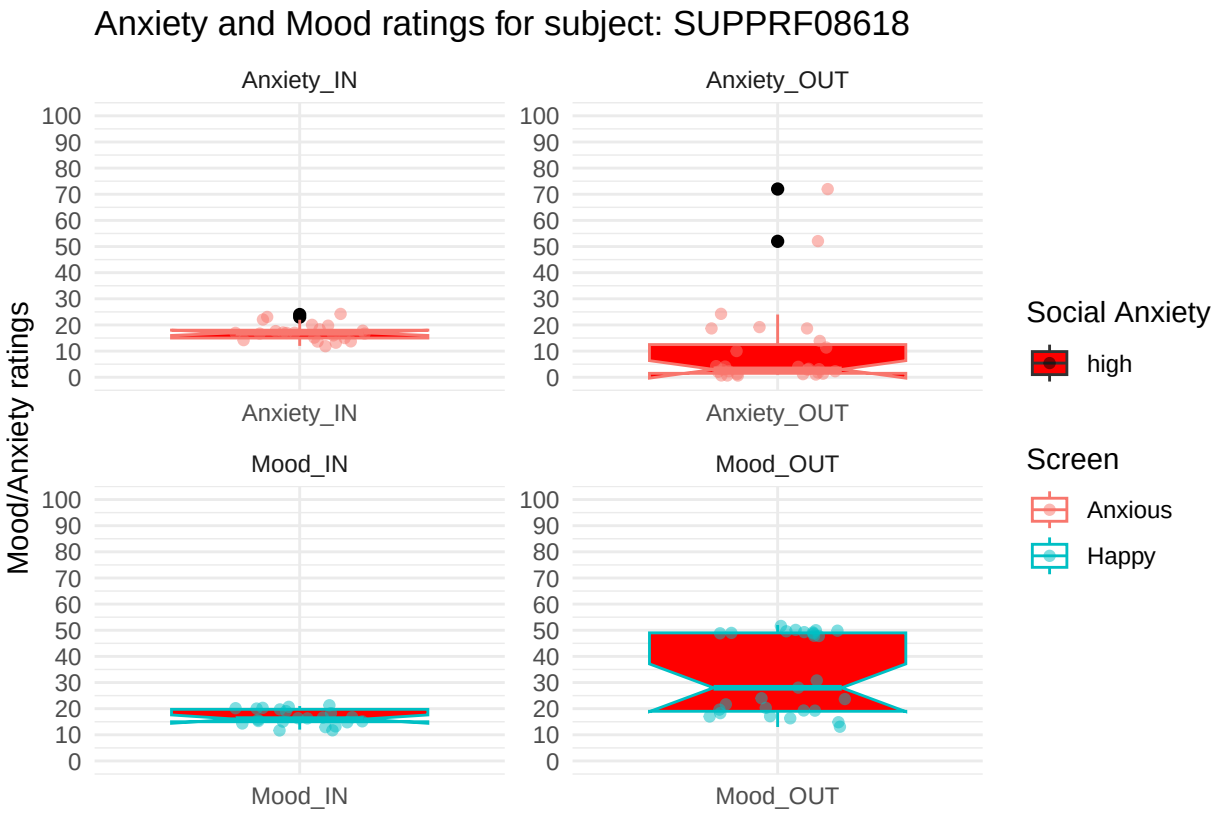

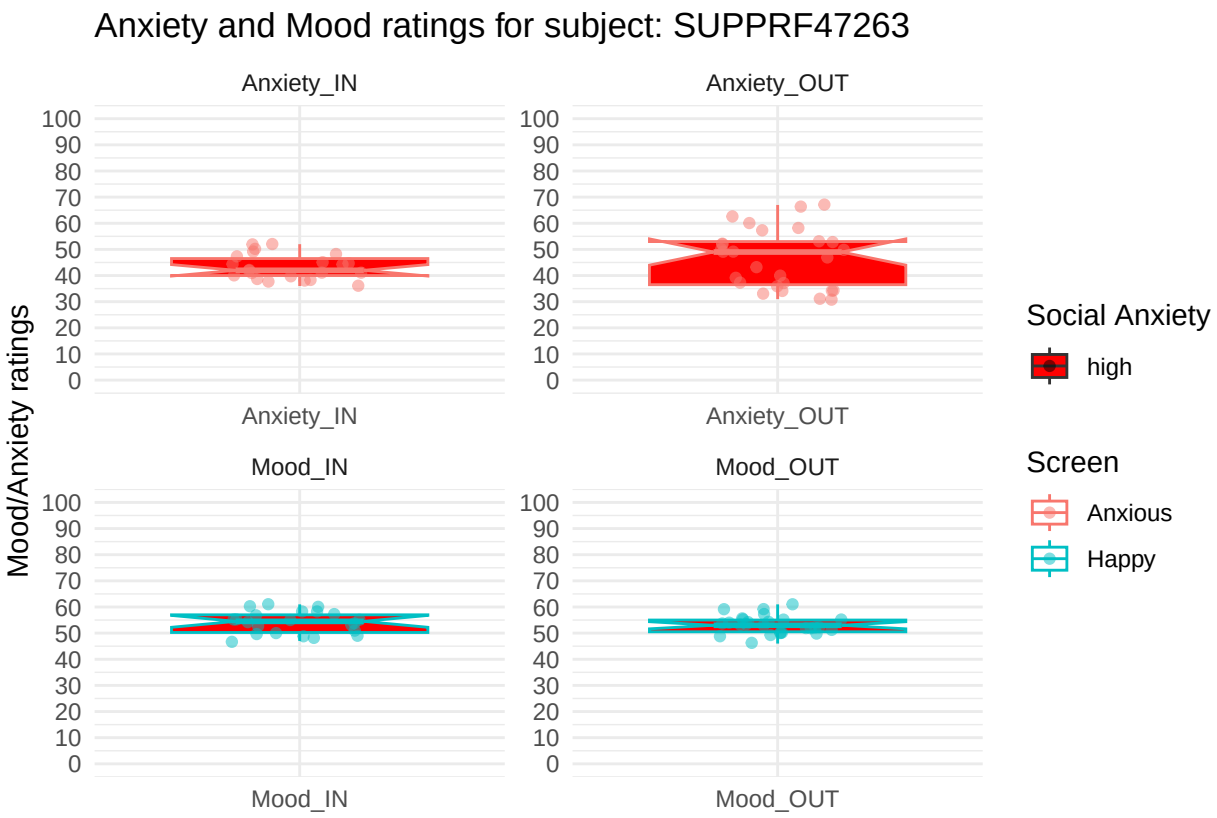
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Mood_OUT
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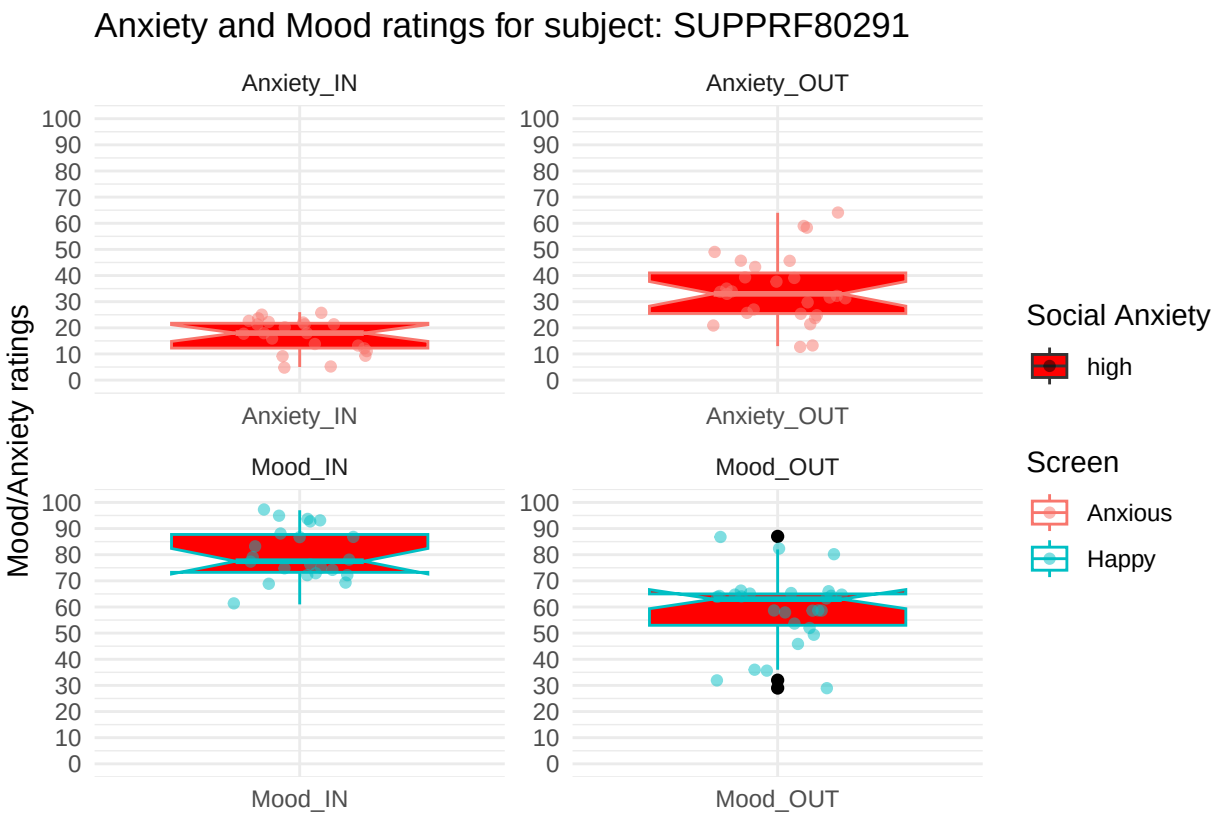
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Anxious
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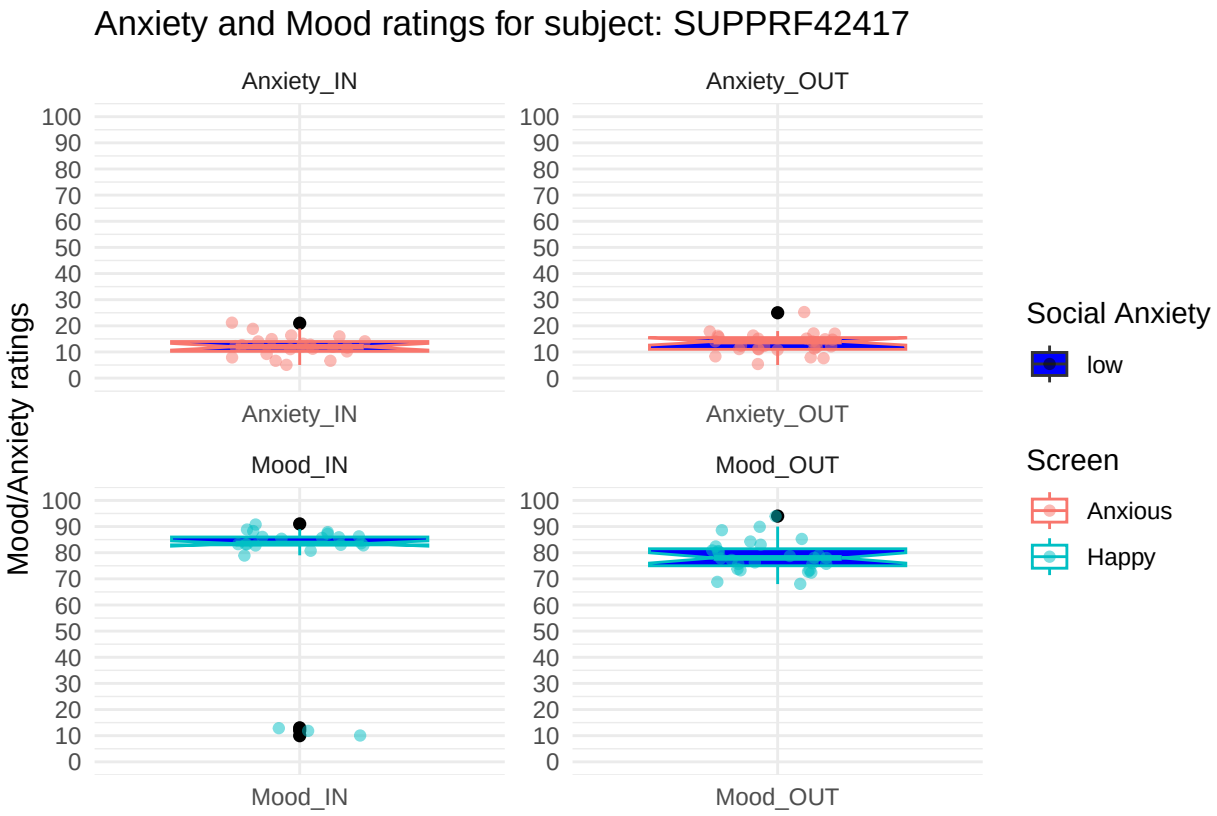
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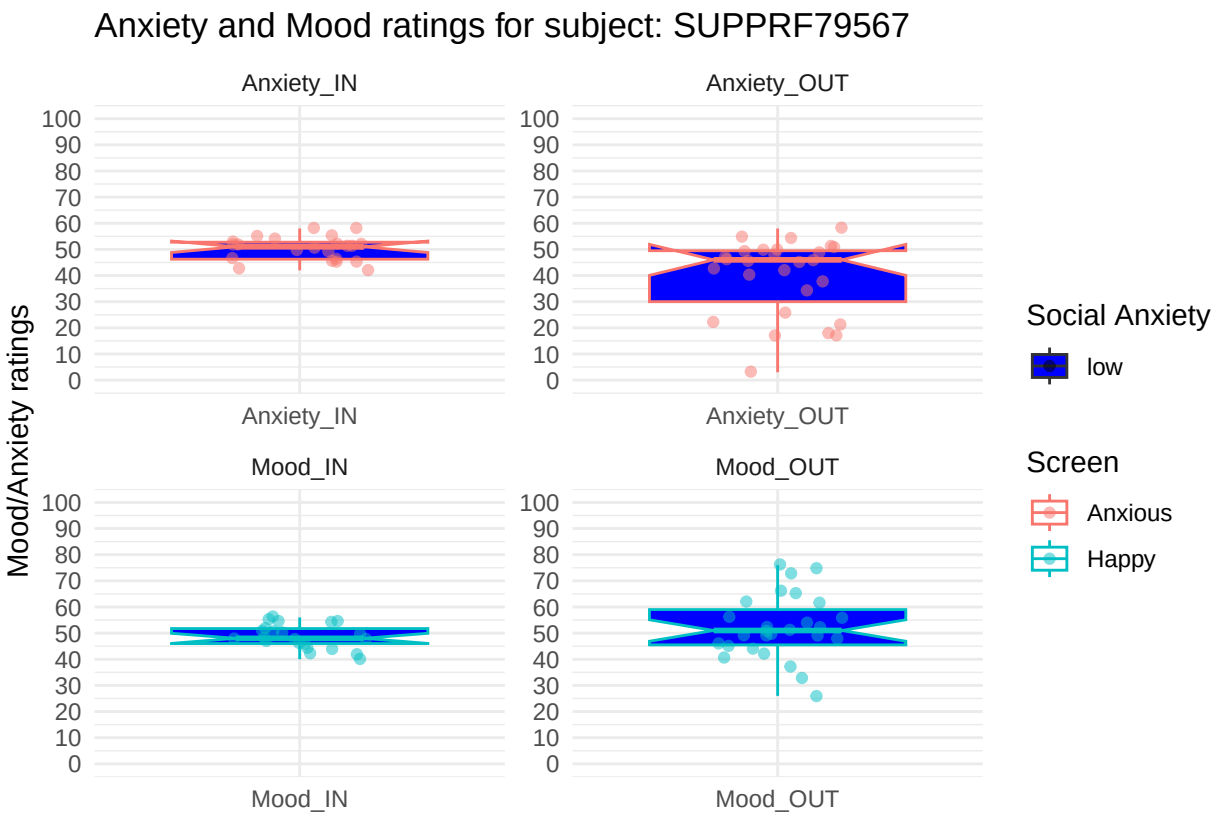
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Mood_IN
Mood_OUT
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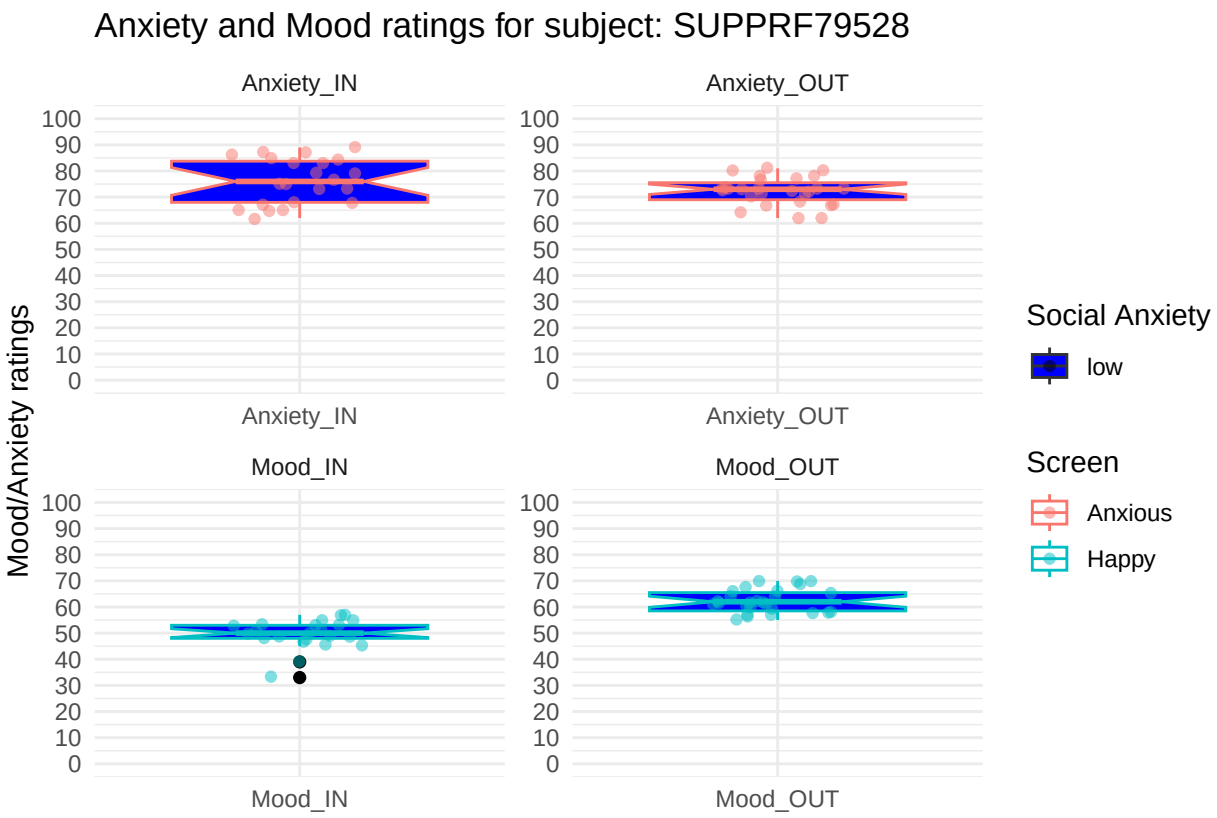
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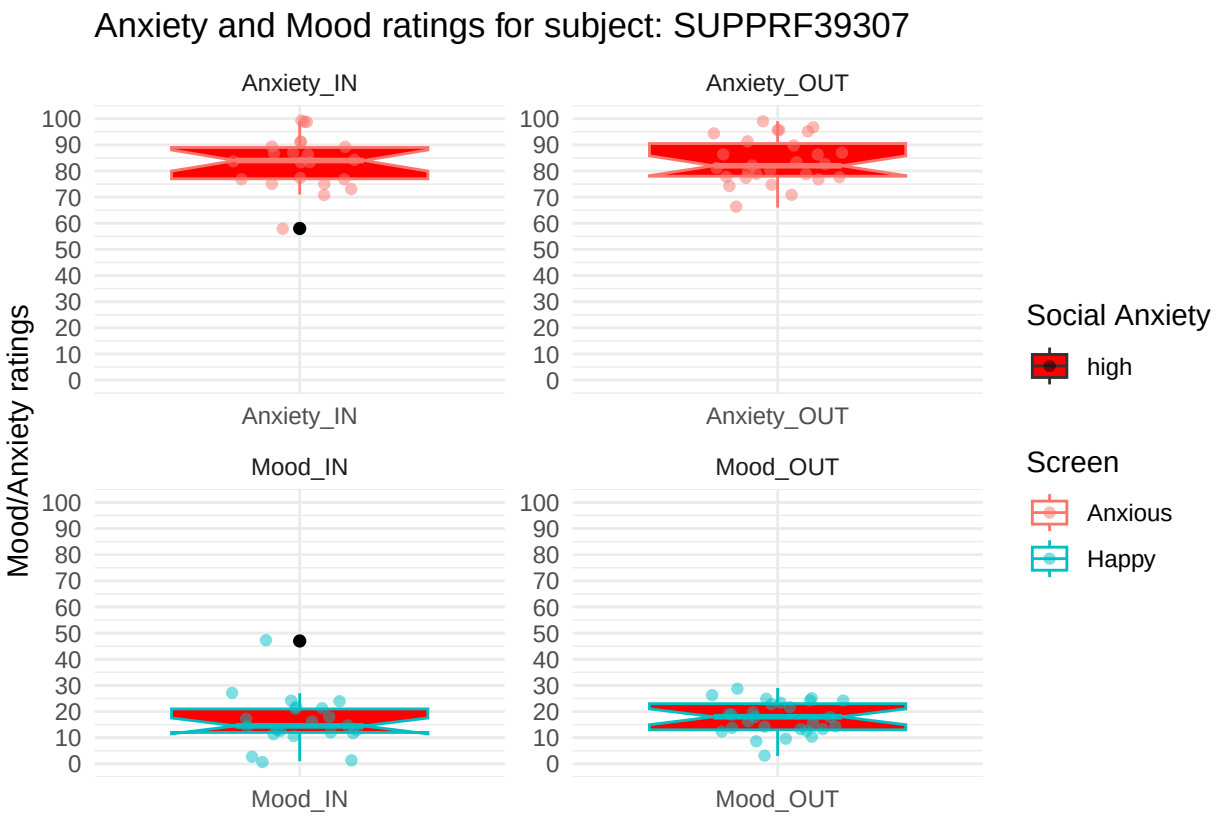
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Social Anxiety
high
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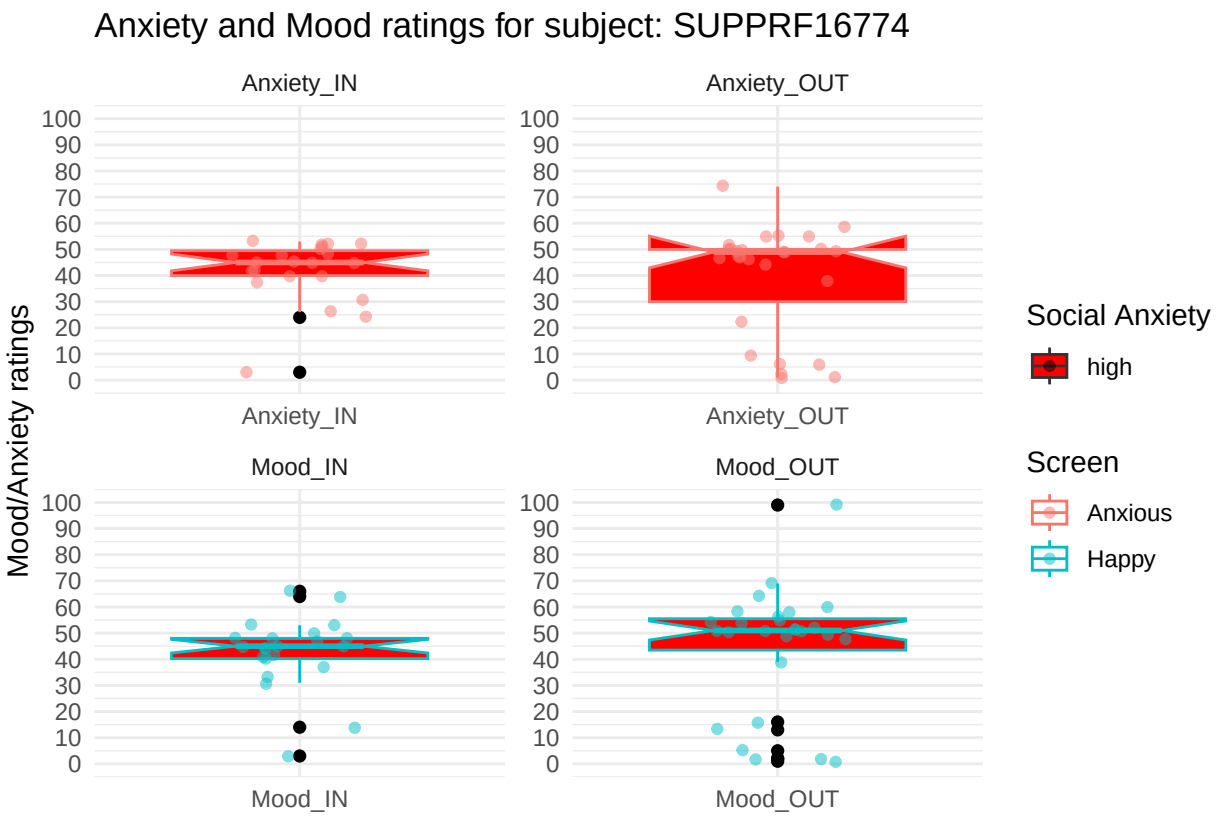
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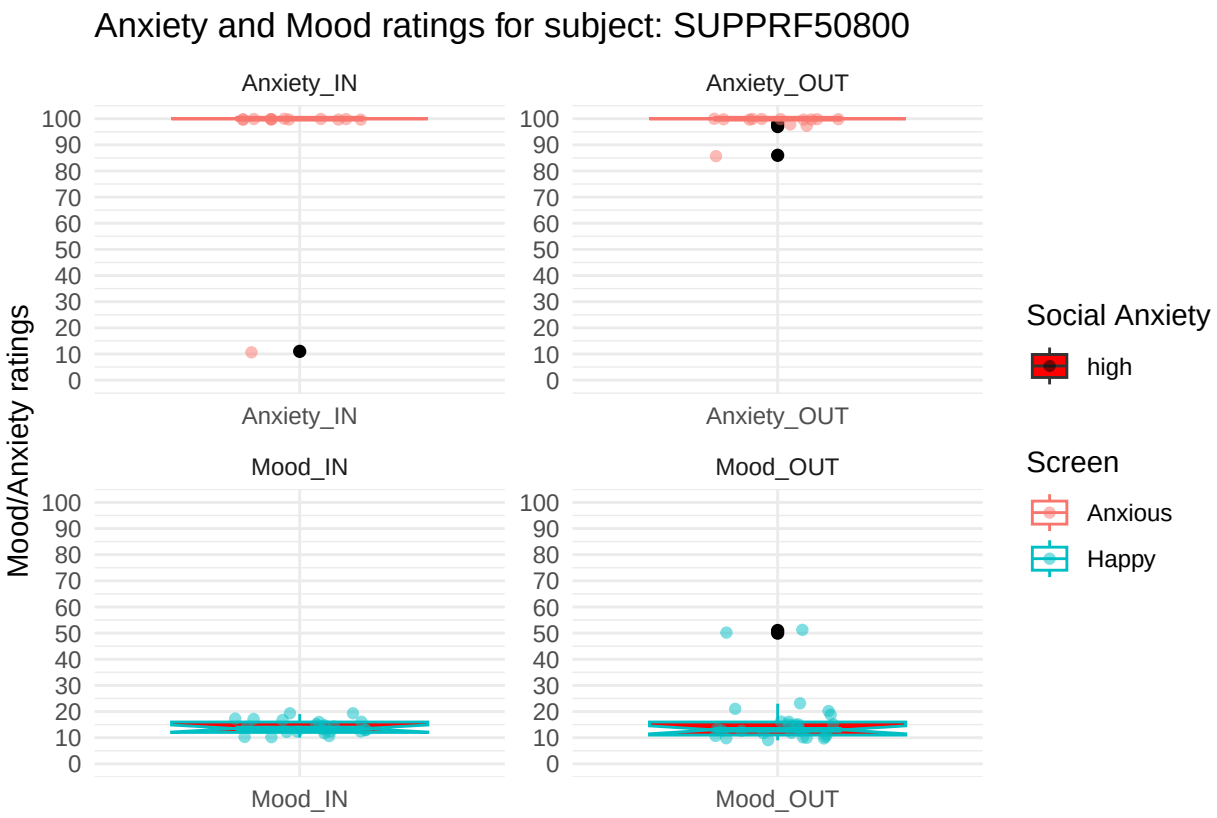
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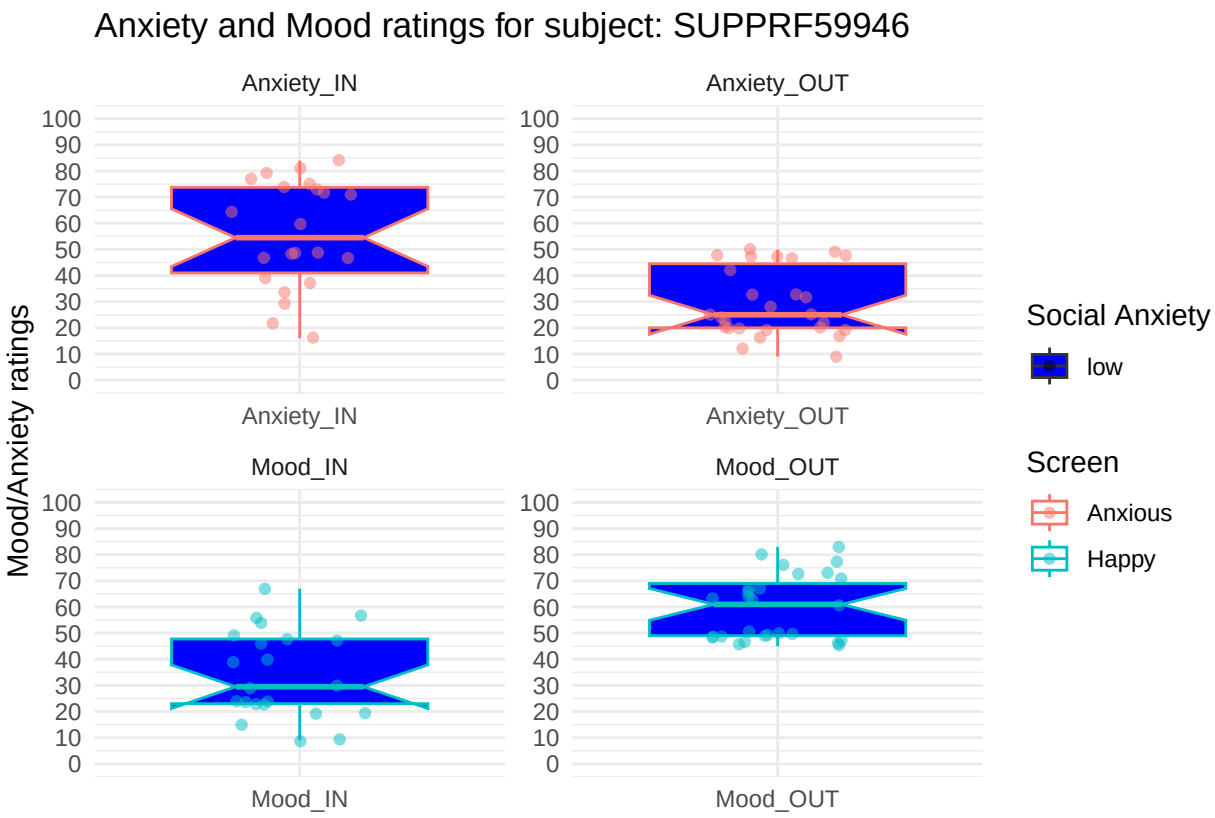
Happy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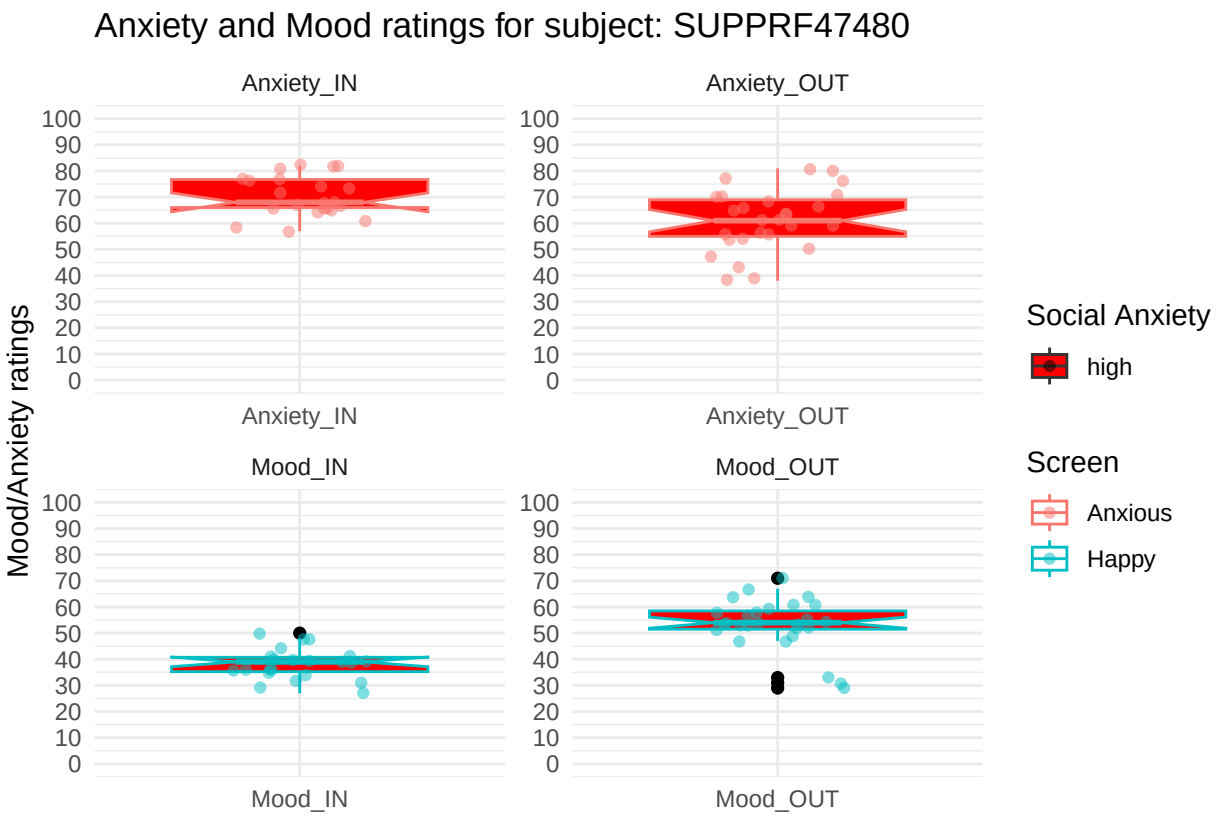
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Social Anxiety
high
Screen
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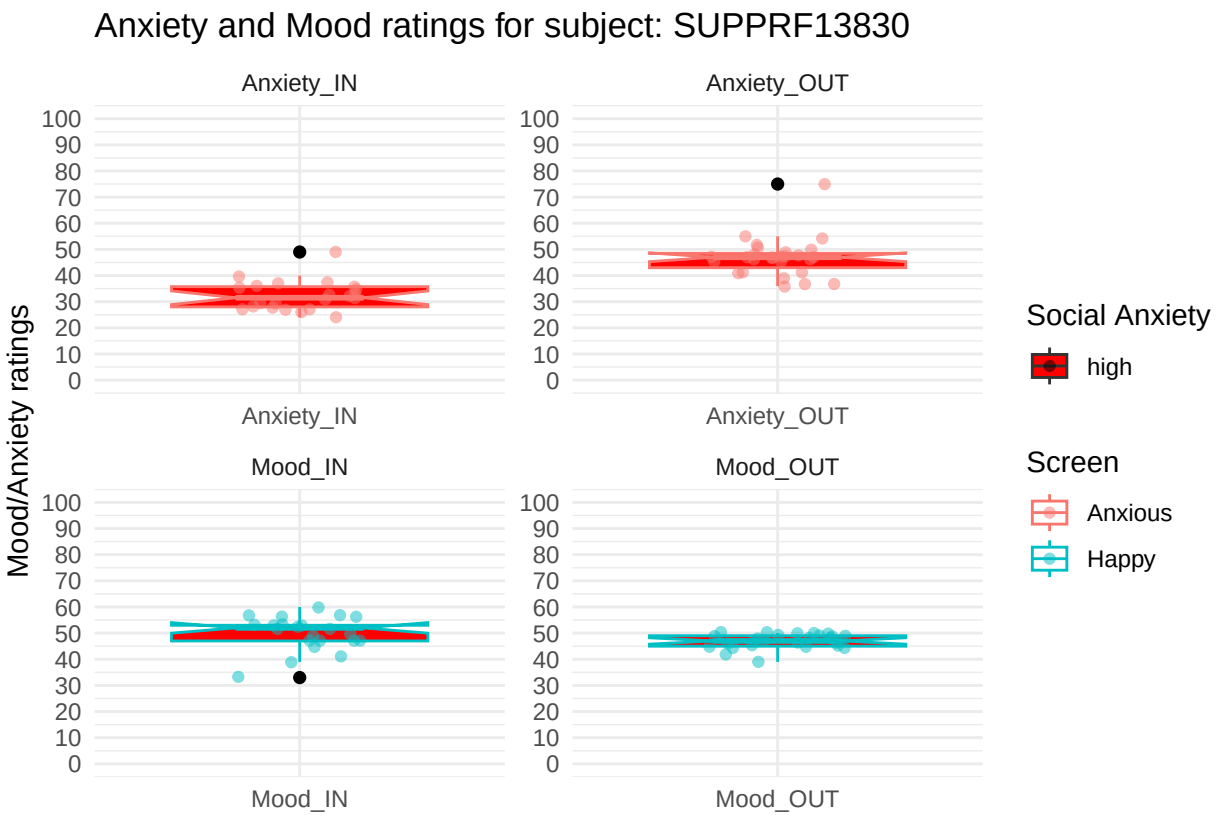
Happy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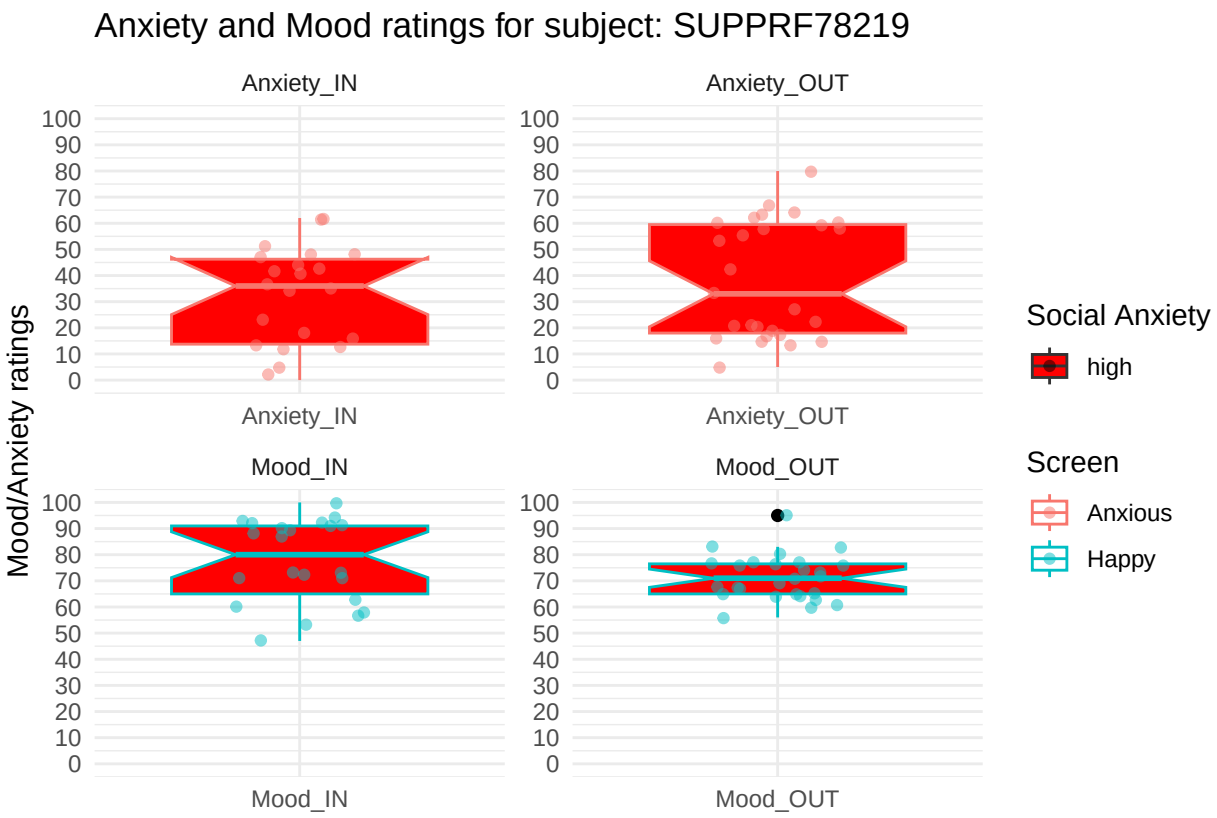
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Mood_IN
Mood_OUT
Social Anxiety
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Screen
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Happy


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Mood_IN
Mood_OUT
Mood/Anxiety ratings
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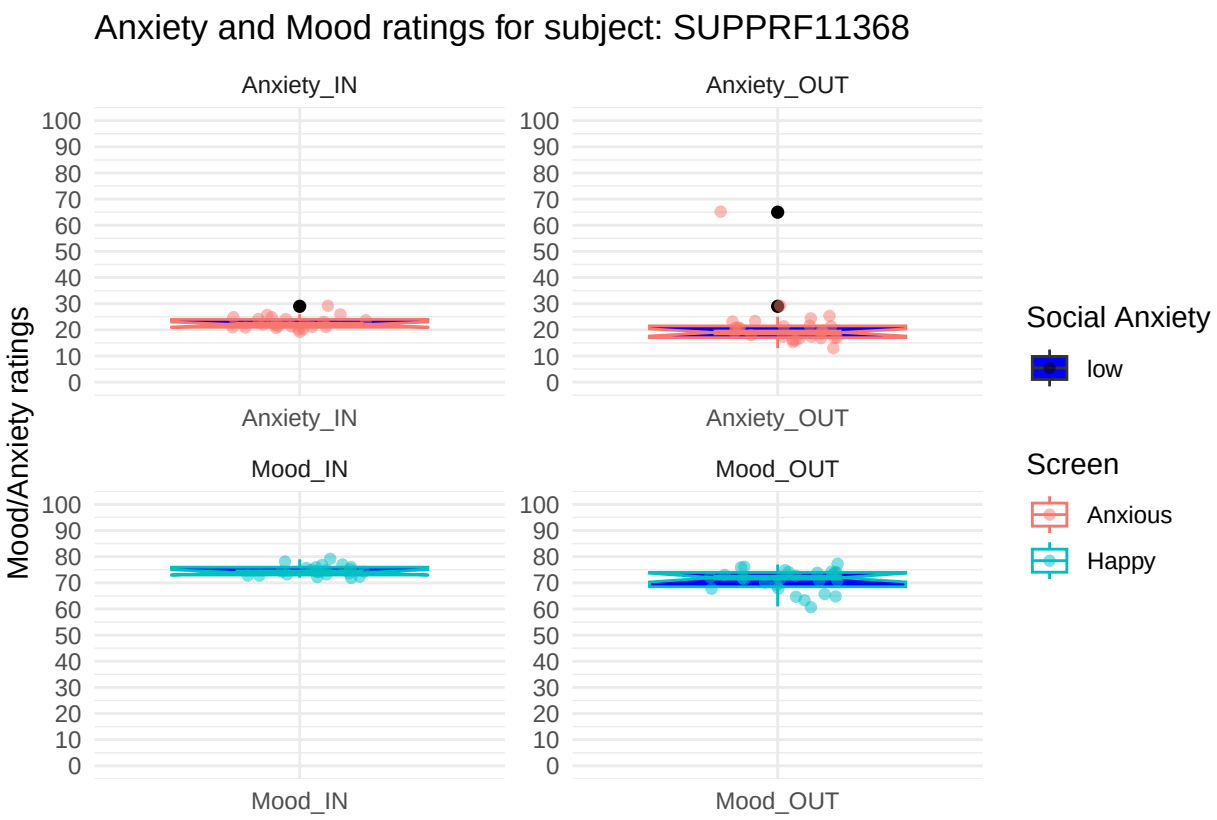
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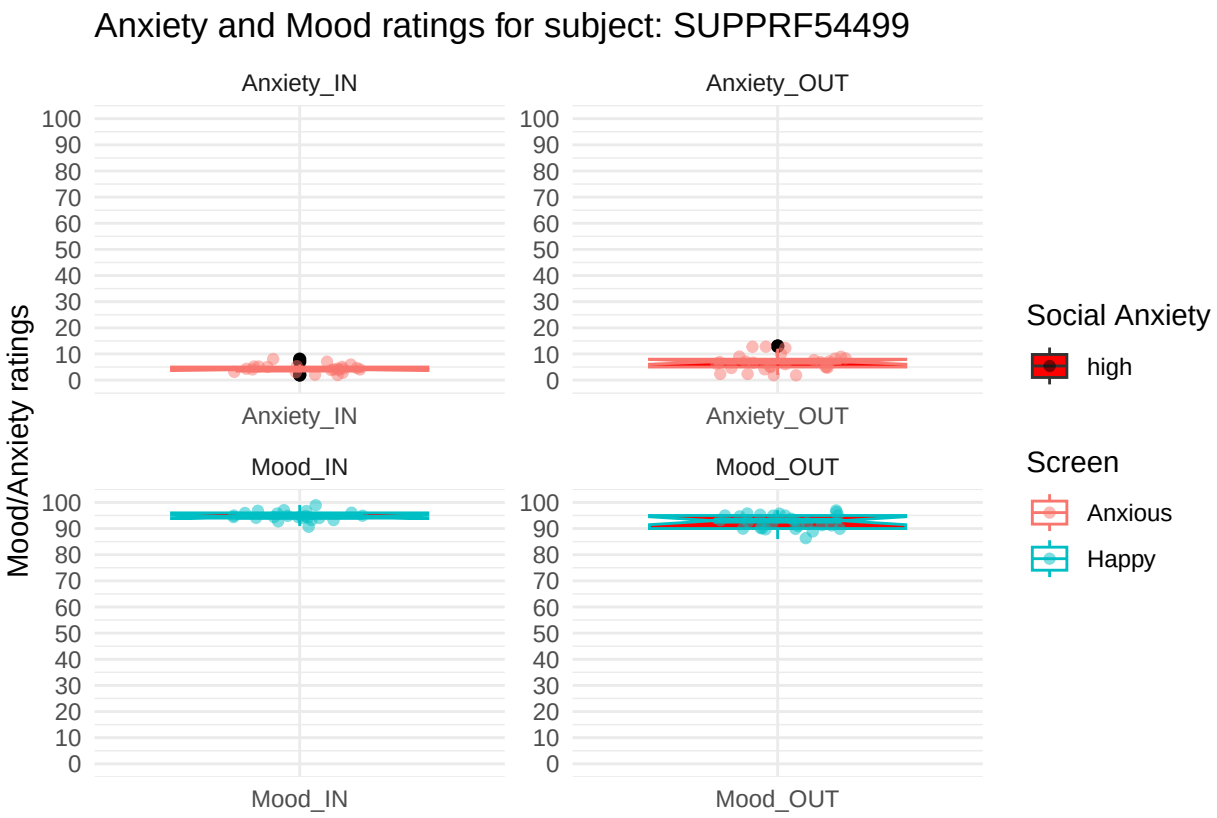
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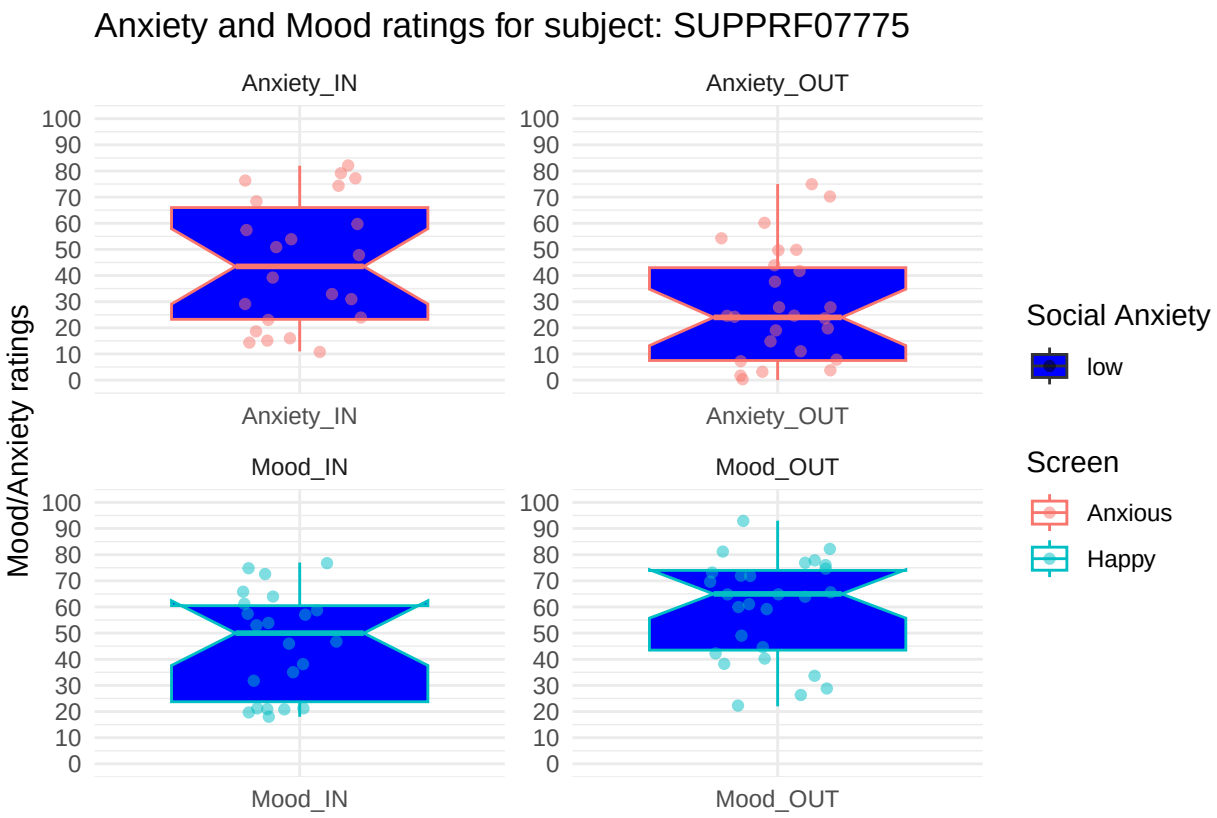
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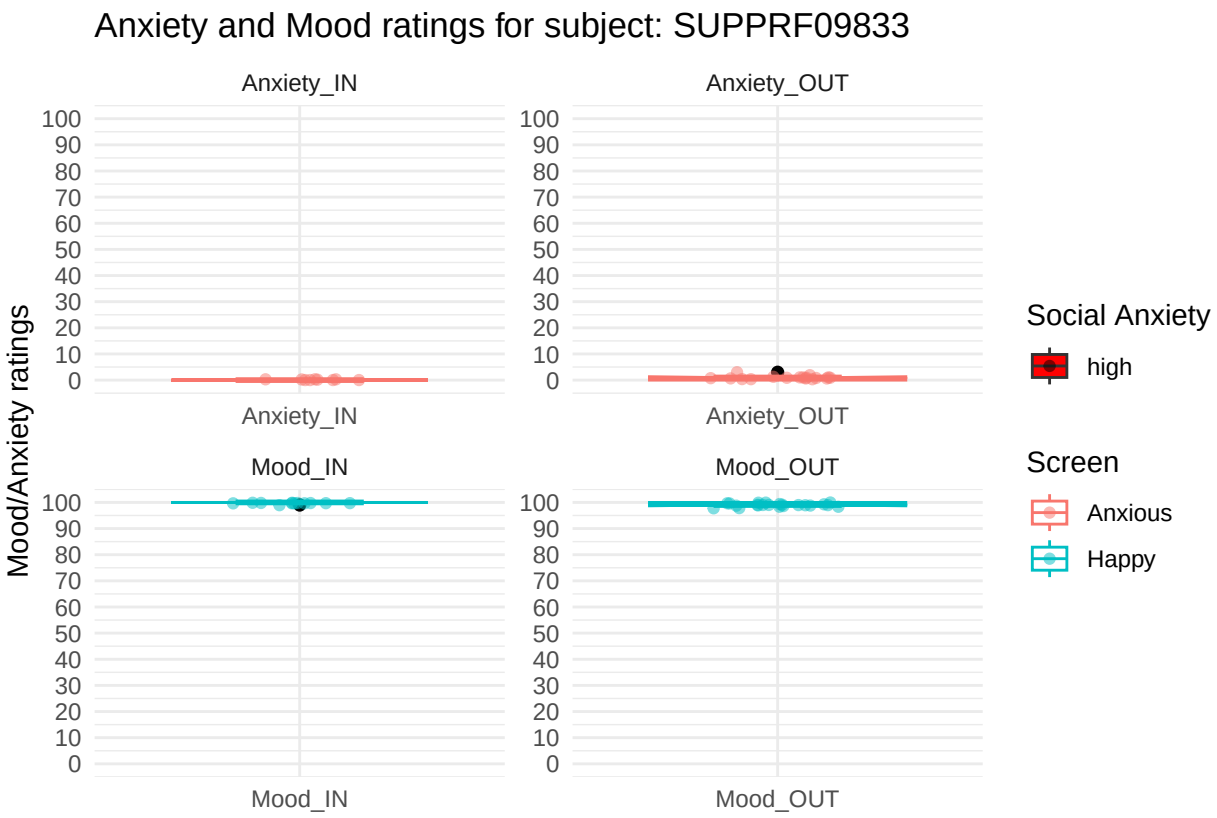
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Mood_OUT
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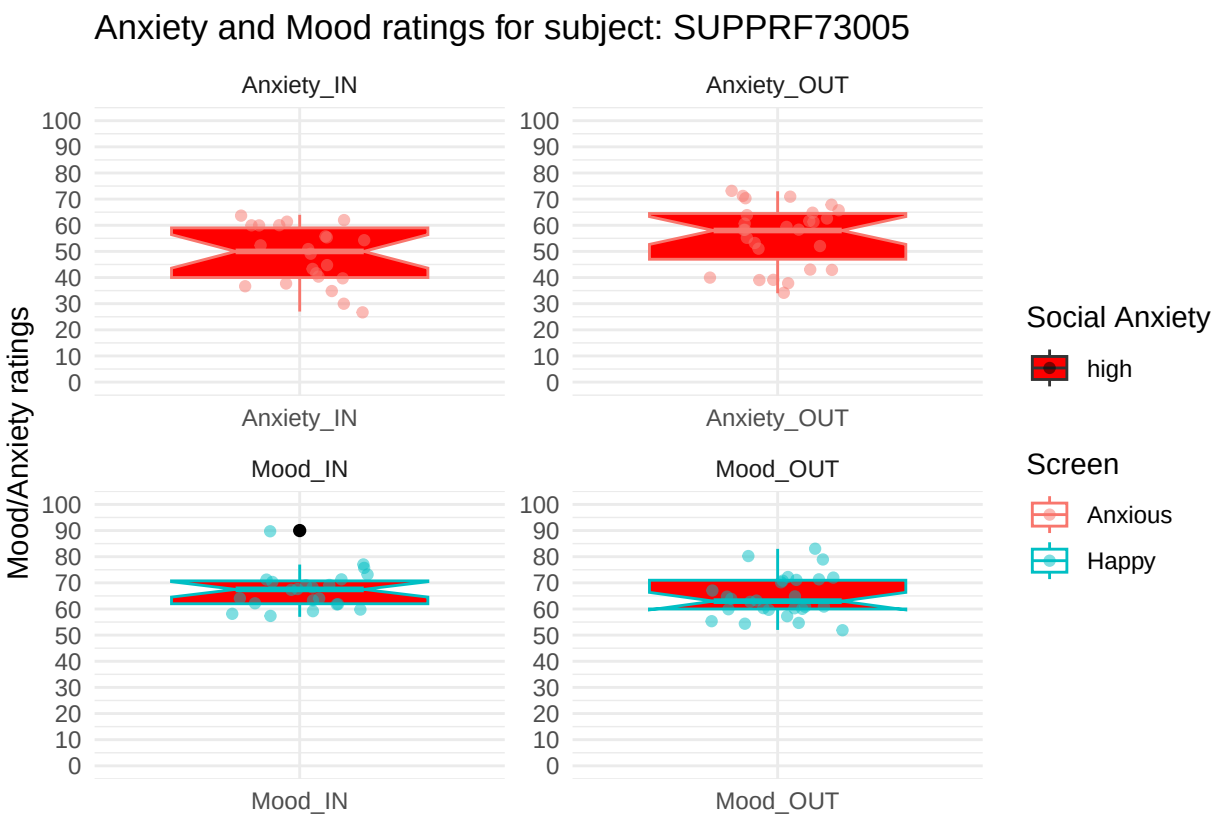
Happy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Mood_OUT
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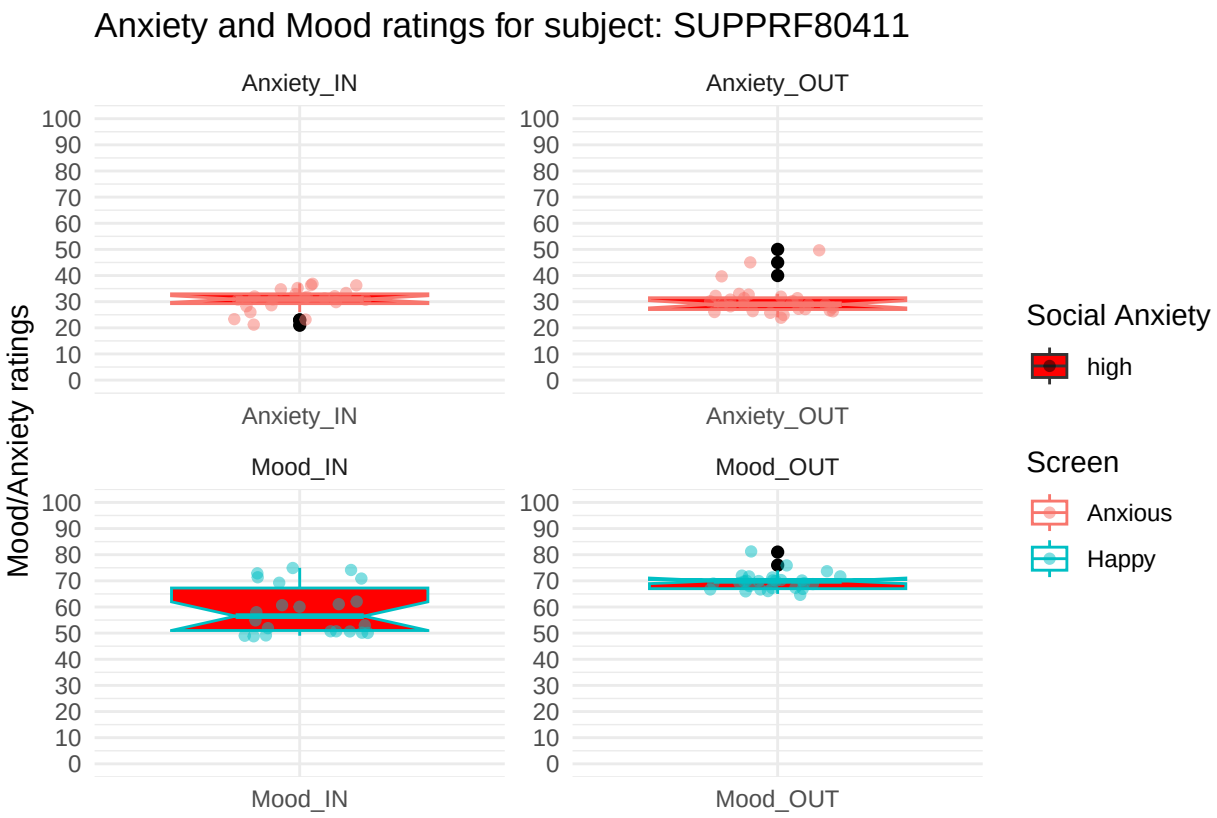
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Mood_OUT
Social Anxiety
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Anxious
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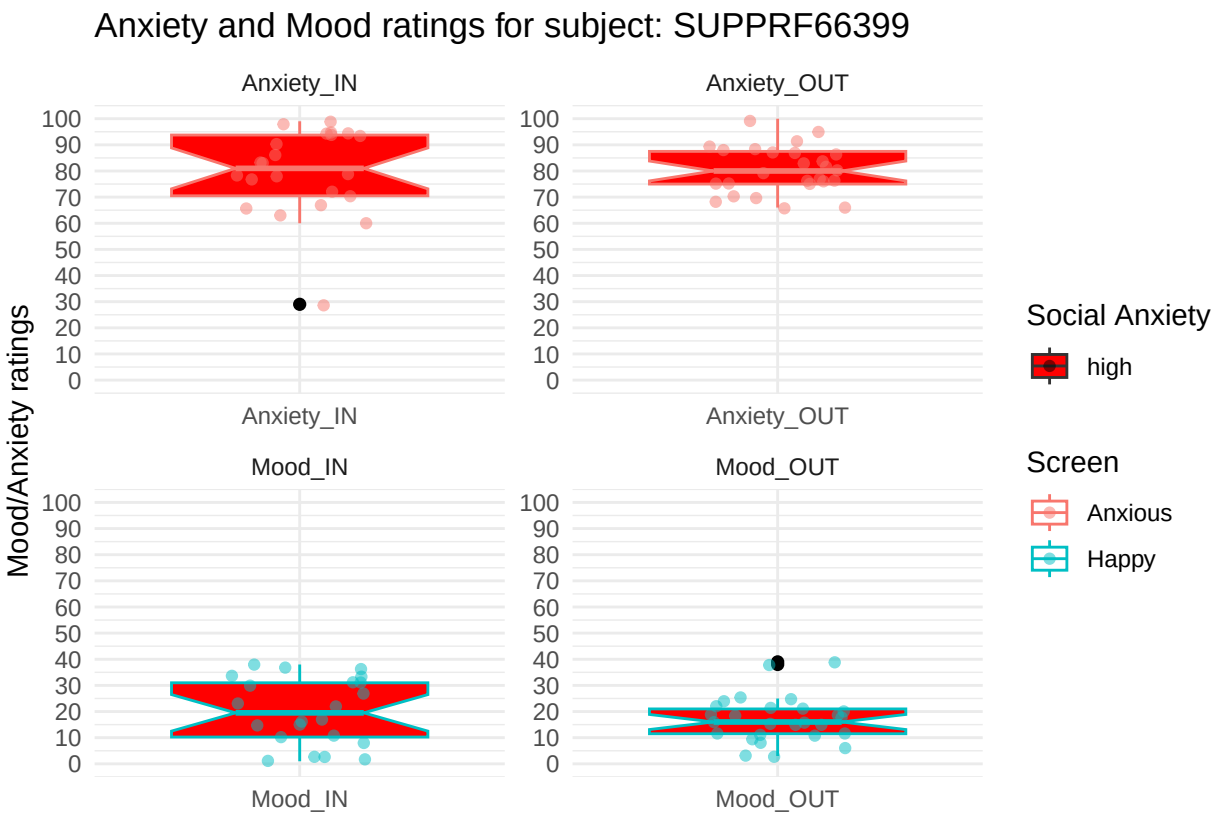
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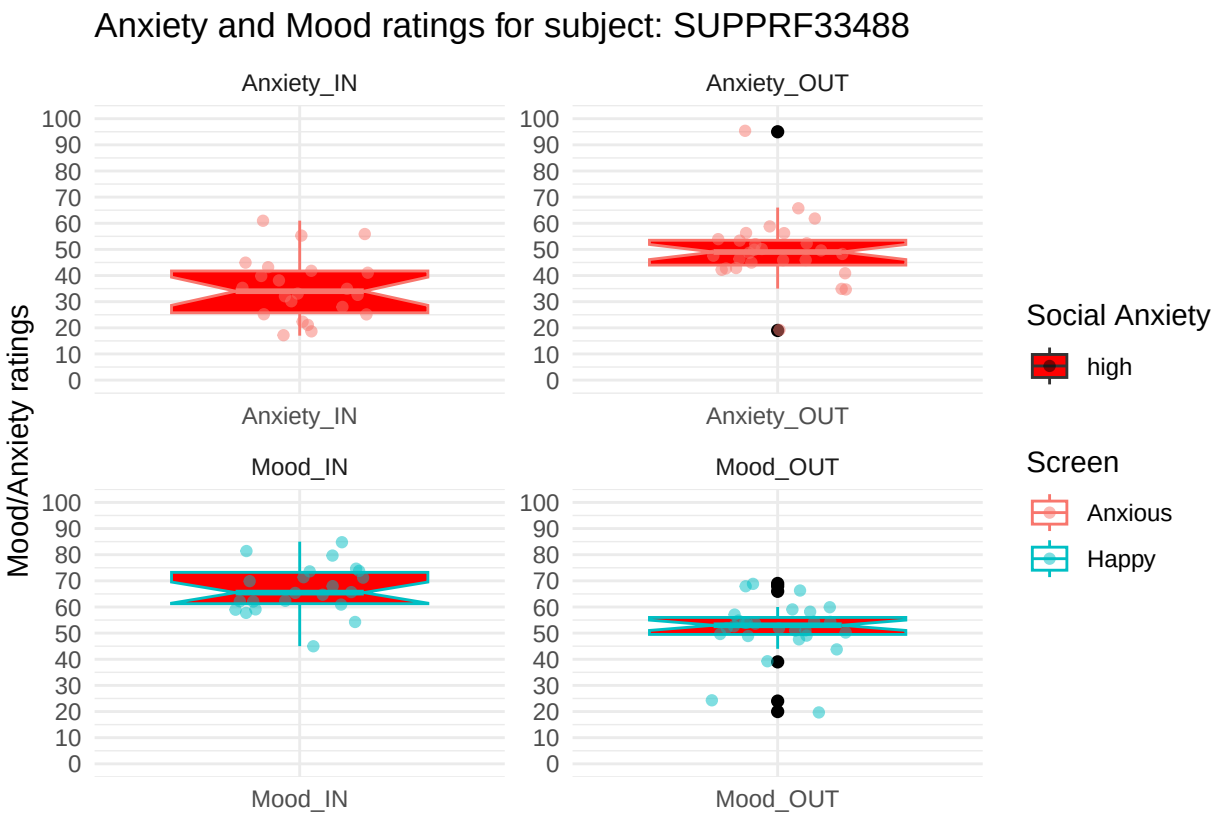
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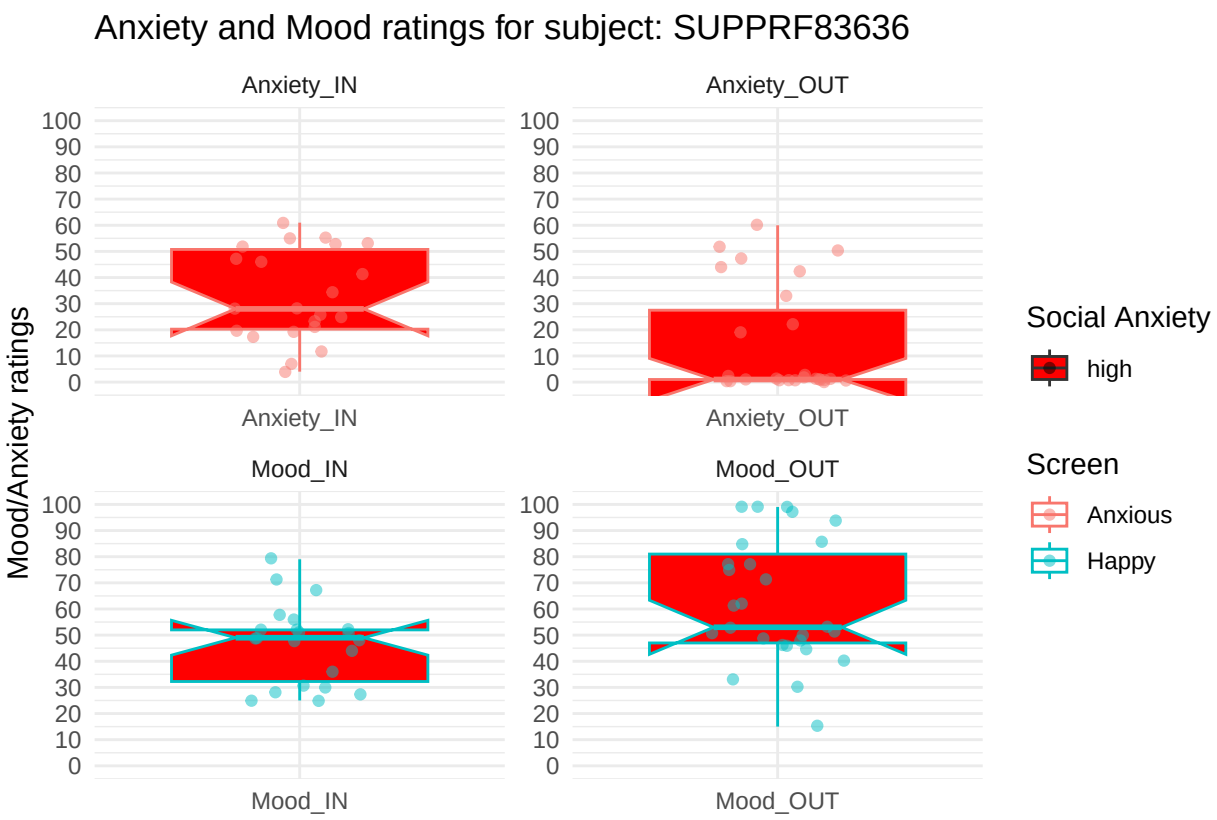
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Anxious
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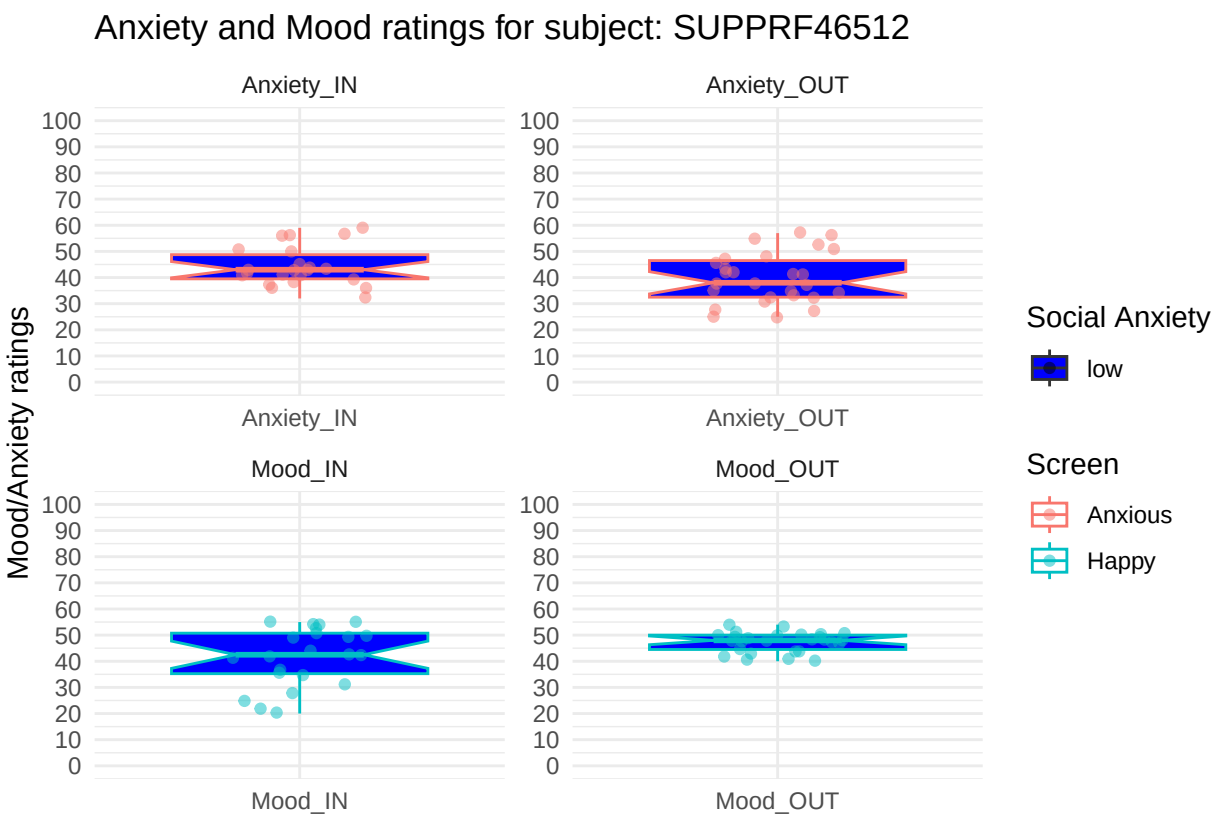
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Social Anxiety
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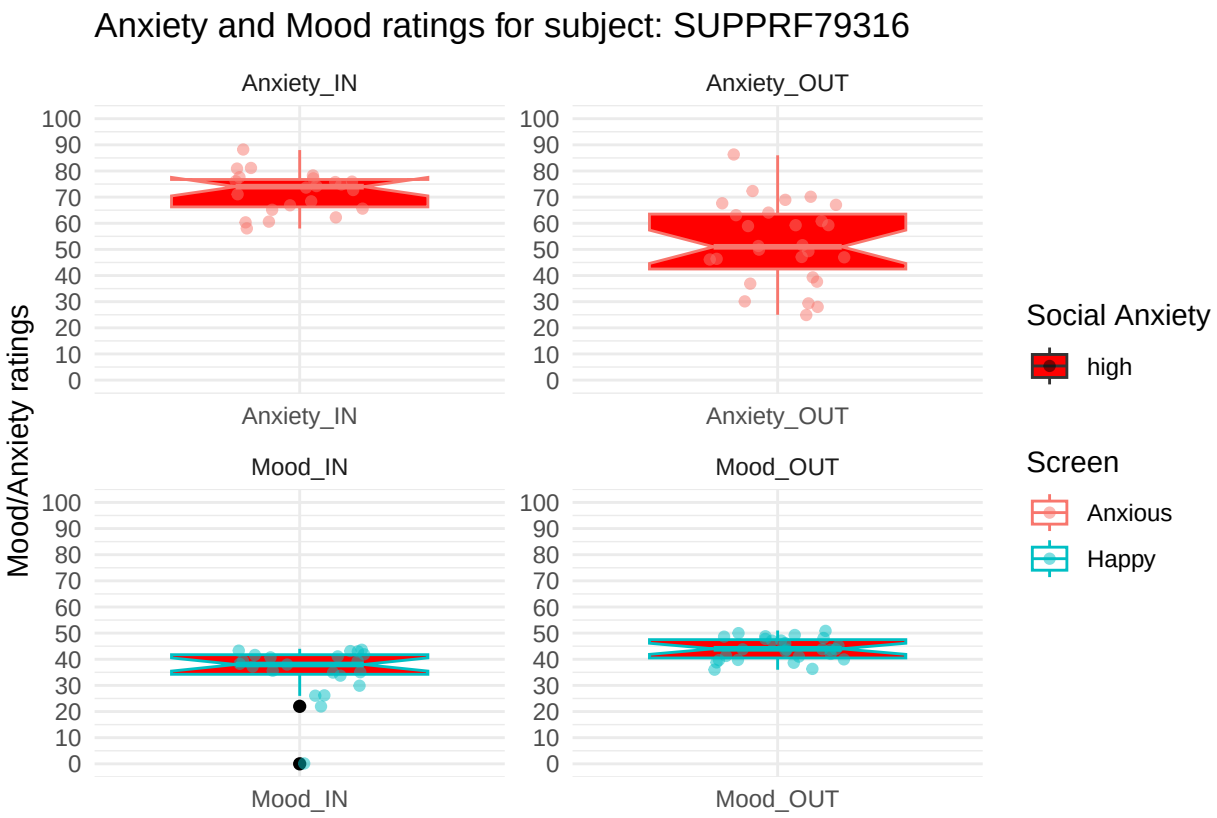
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Social Anxiety
high
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Anxious
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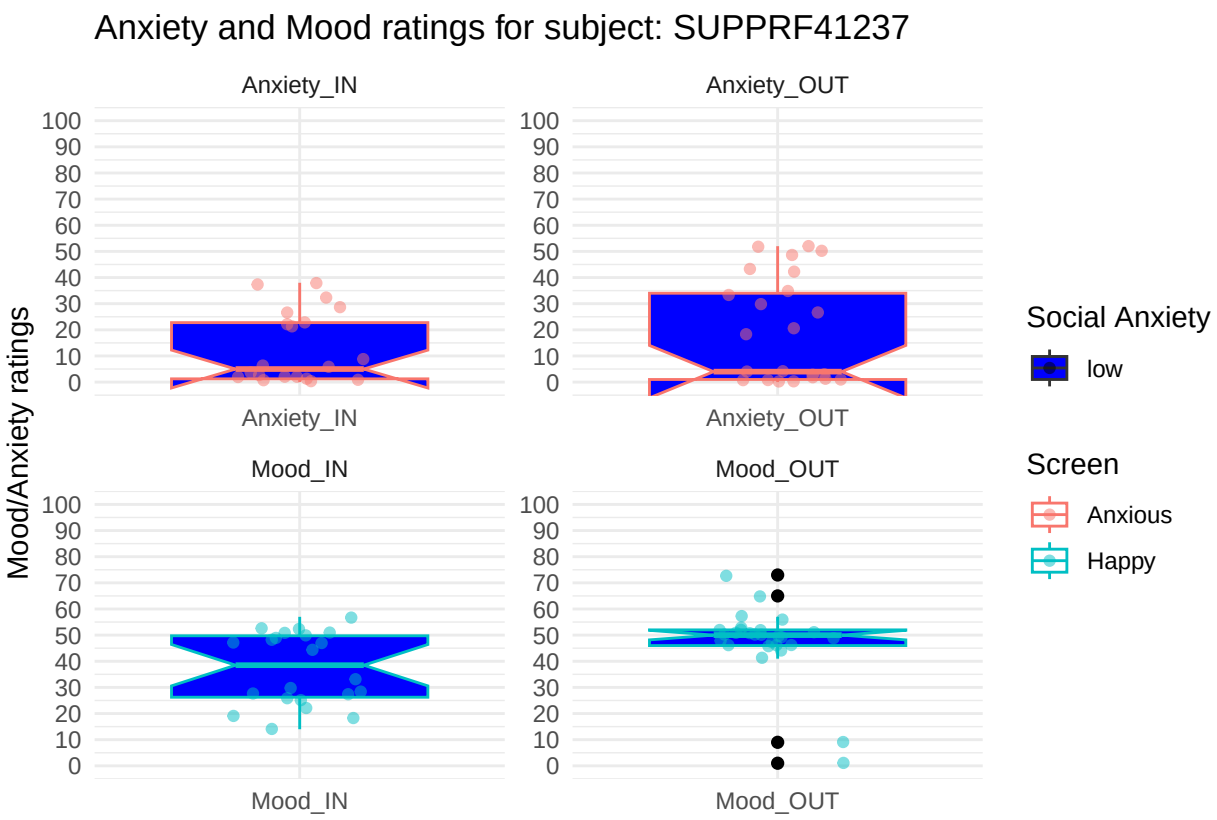
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Mood_OUT
Social Anxiety
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Anxious
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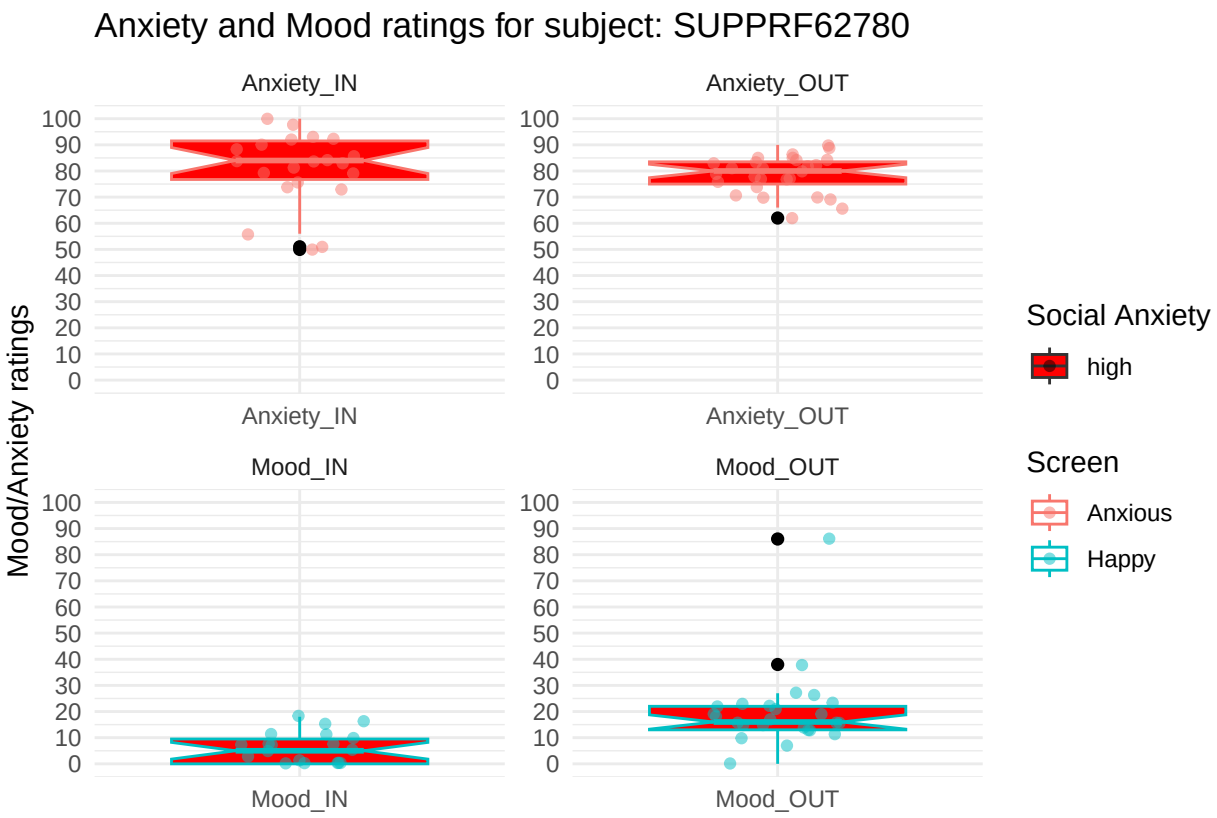
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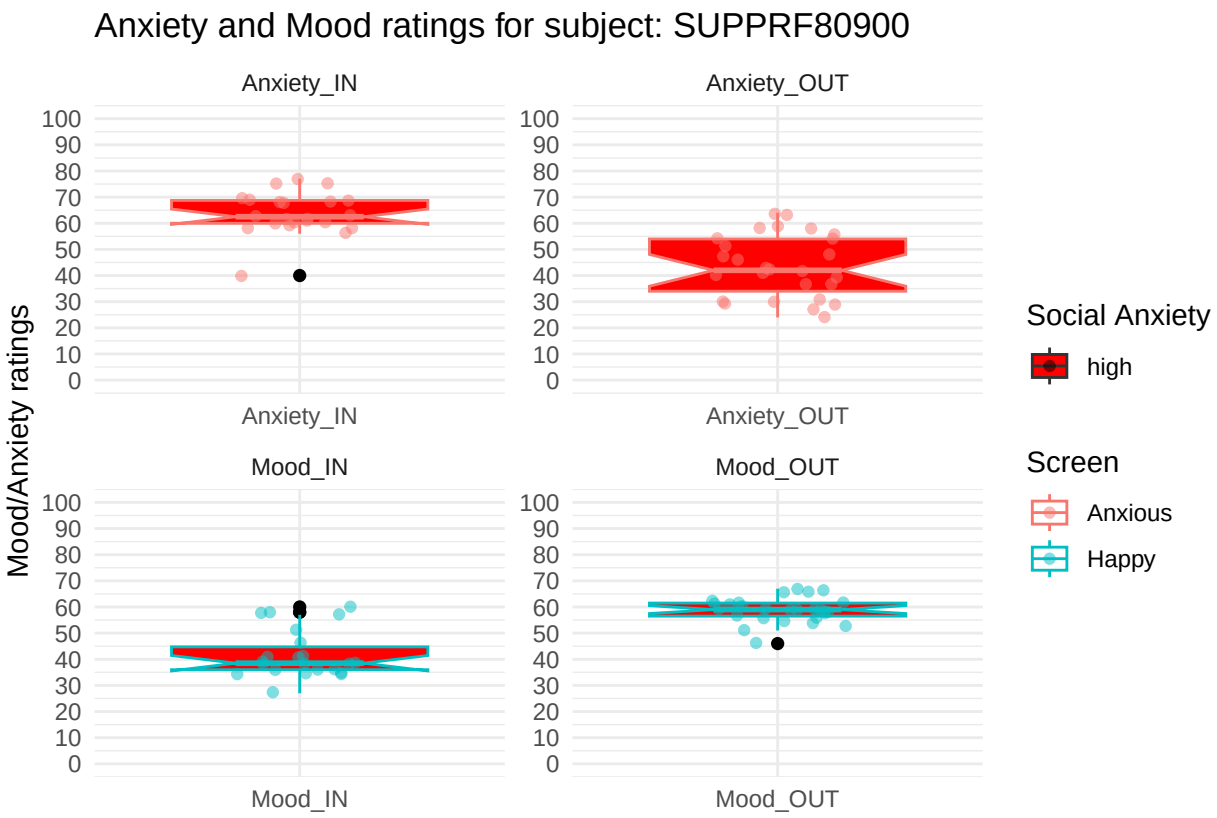
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Anxiety_OUT
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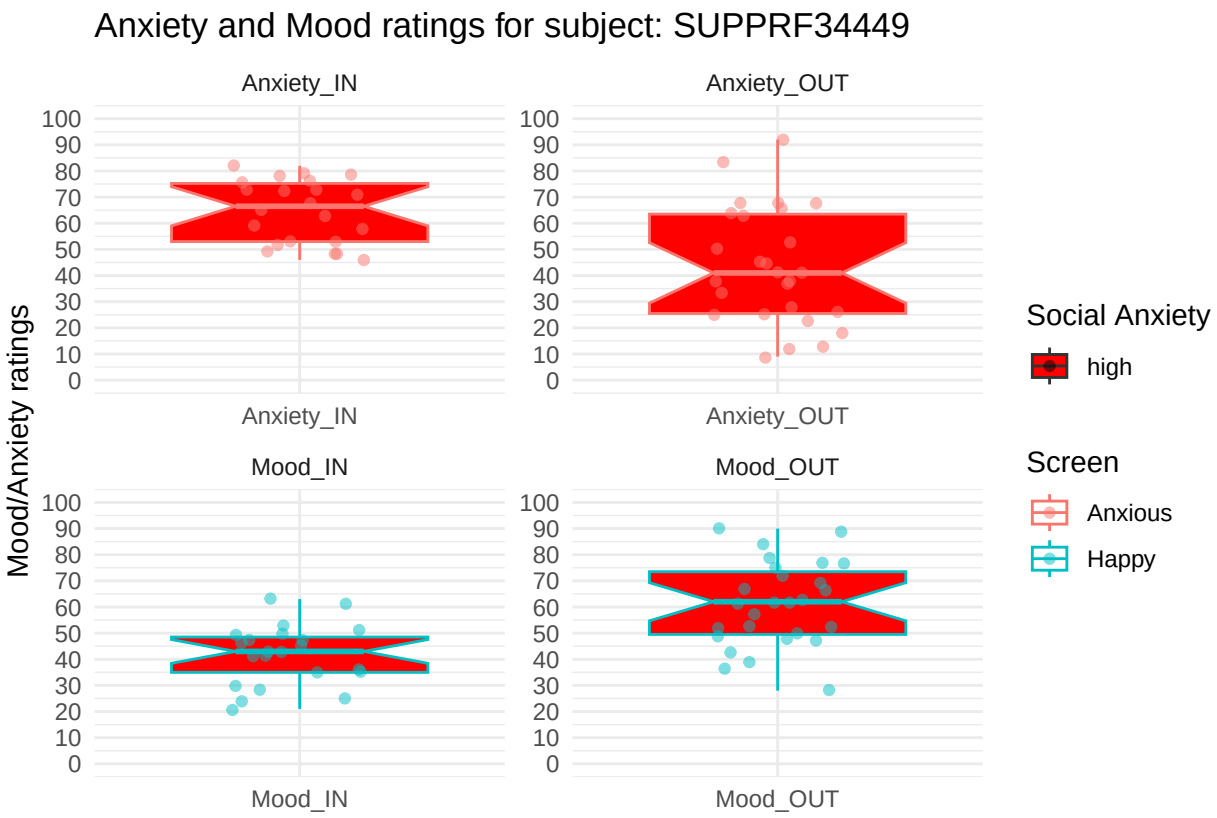
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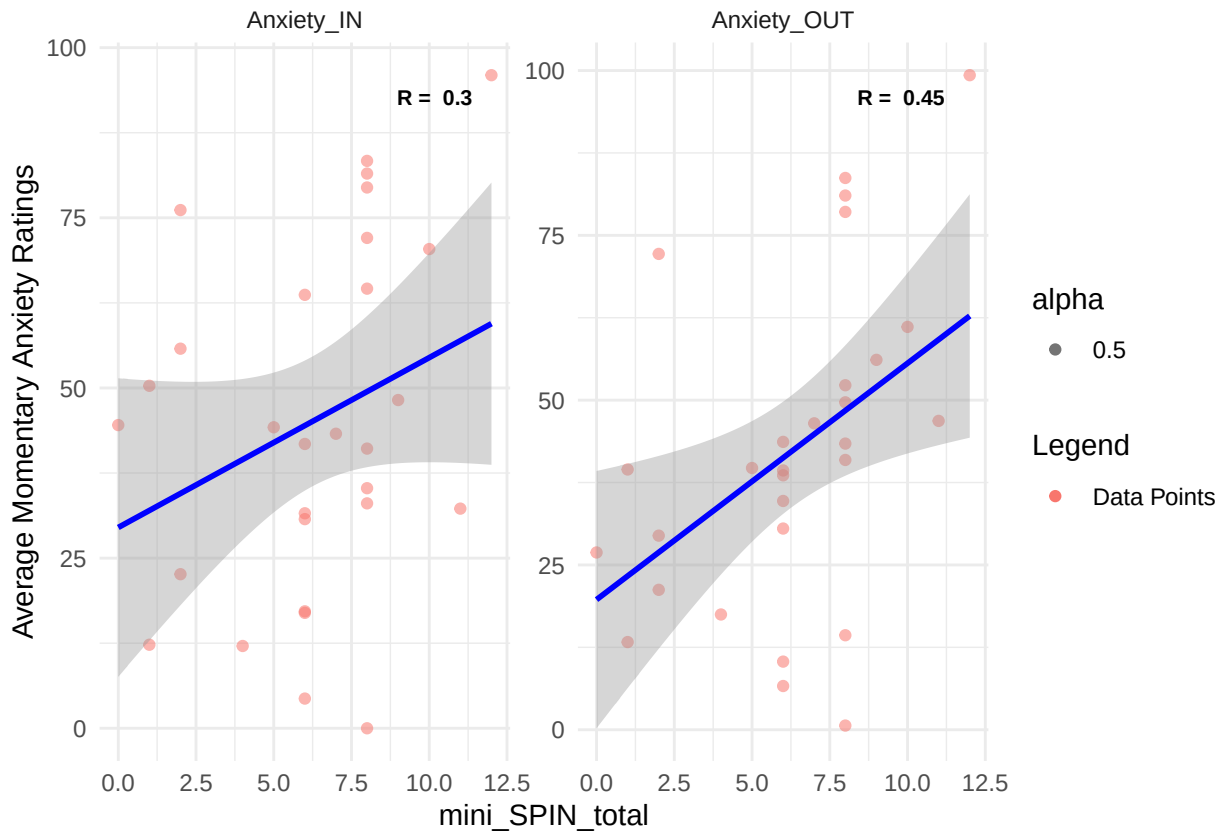
10
0
Anxiety_IN
Anxiety_OUT
Mood_IN
Mood_OUT
Social Anxiety
high
Screen
Anxious
Happy

Relationship between mini_SPIN and momentary anxiety ratings

The plot below show the relationship between the (average) anxiety ratings on the task and total mini_SPIN scores.

```
## [1] "correlation between mini_SPIN_total and average anxiety ratings: 0.371658363191696"
```



Relationship between mini_SPIN and momentary mood ratings

The plot below show the relationship between (average) mood ratings on the task and the total mini_SPIN scores.

```
## [1] "correlation between mini_SPIN_total and average anxiety ratings: -0.244178582278169"
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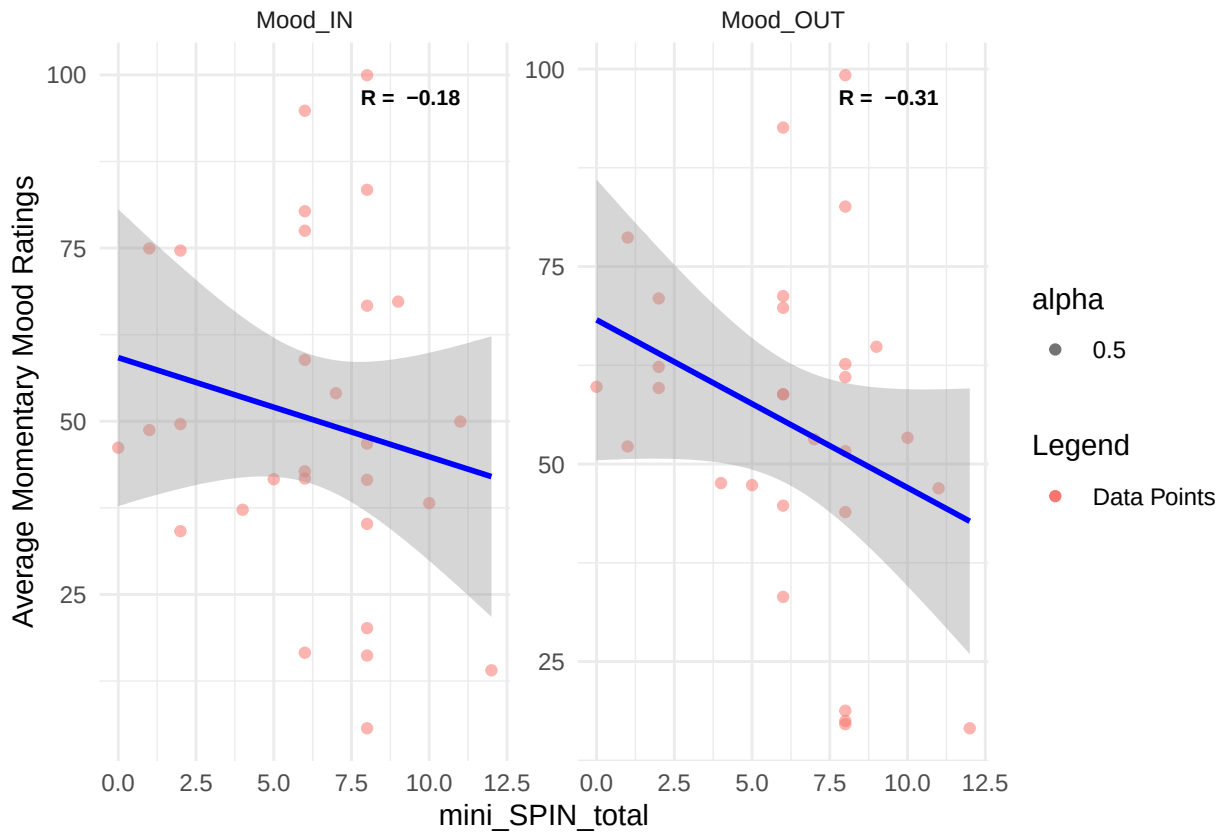
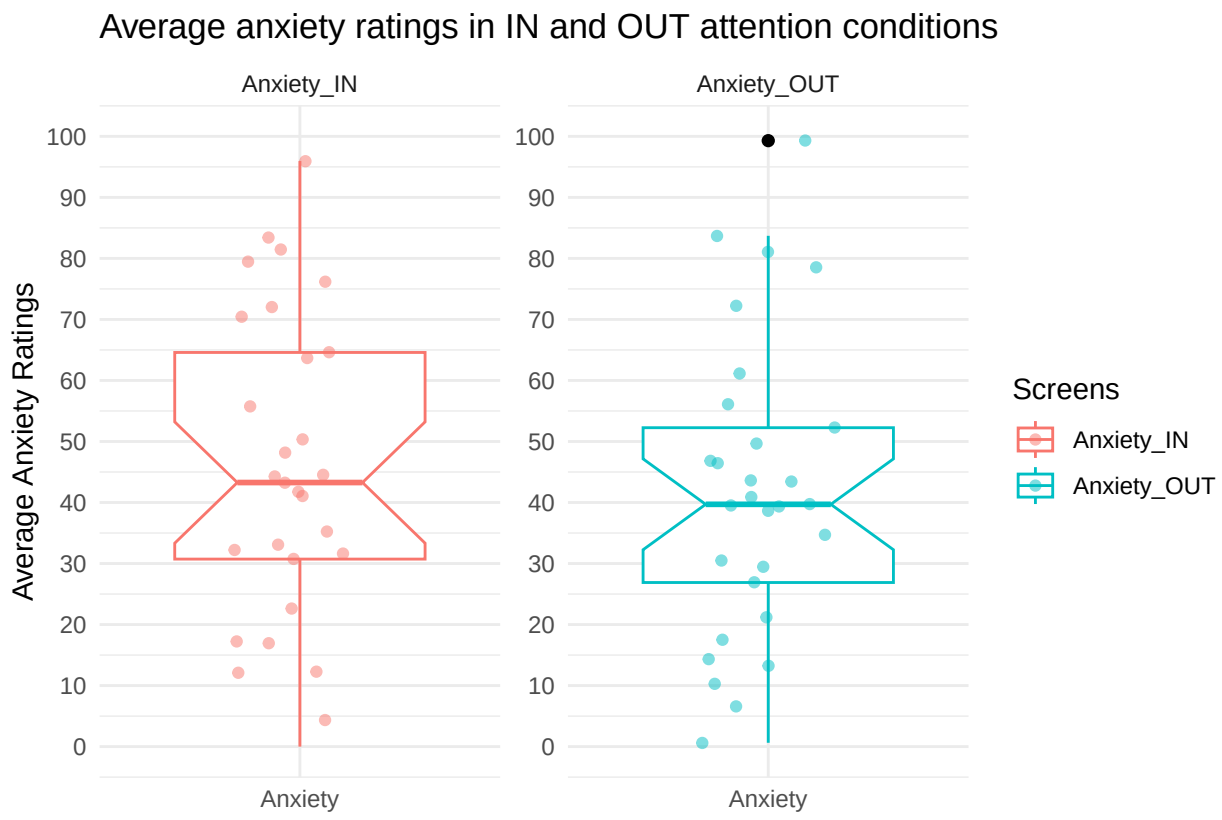


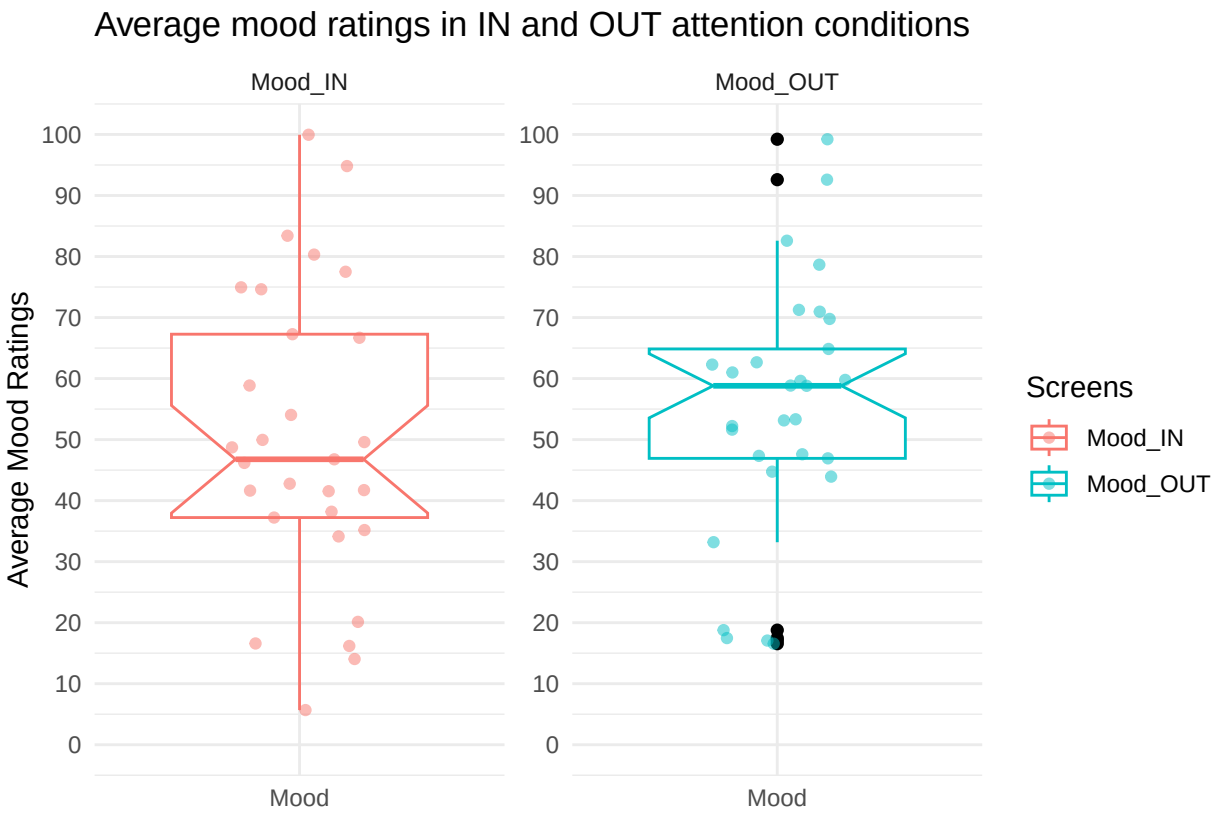
Average Anxiety in IN and OUT attention conditions

The plot below show the average anxiety ratings in IN and OUT attention conditions where people paid internal and external attention respectively. I think without the outlier (black dot), the difference becomes bigger, will test it later.



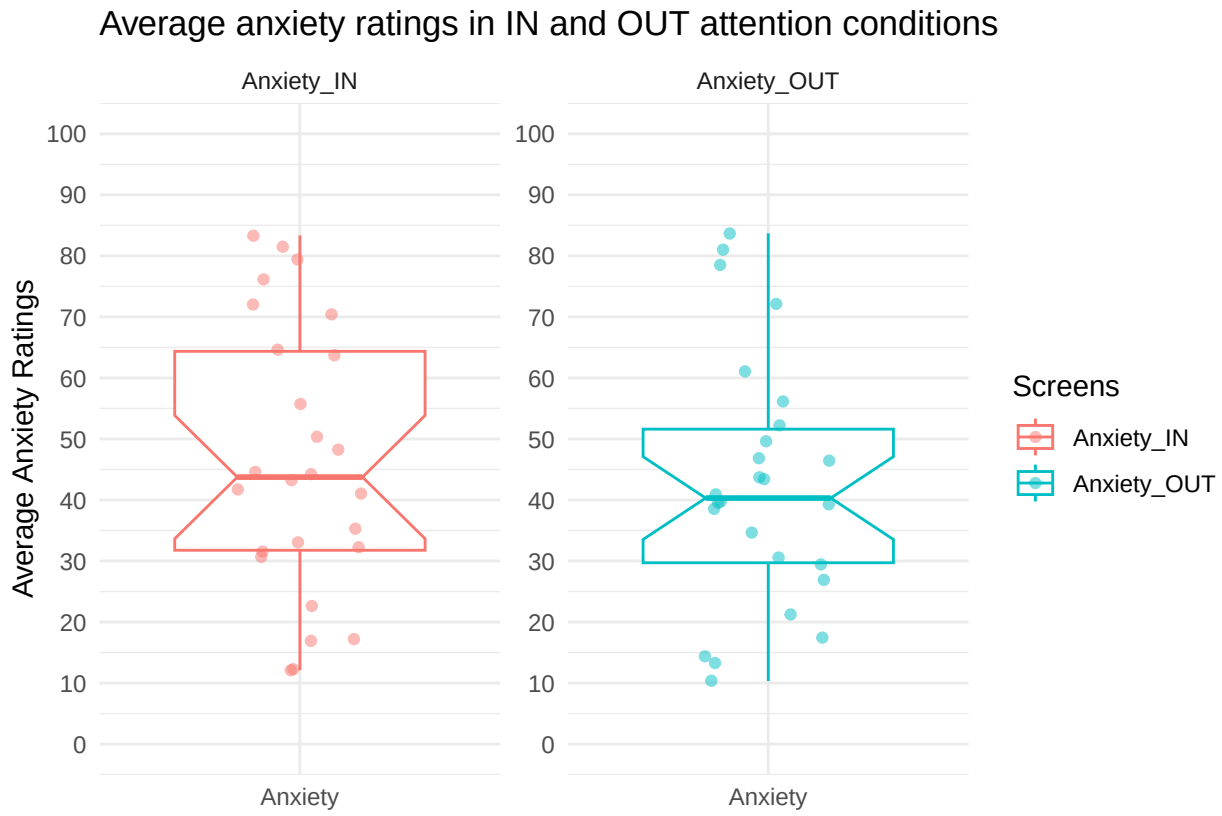
Average Mood in IN and OUT attention conditions

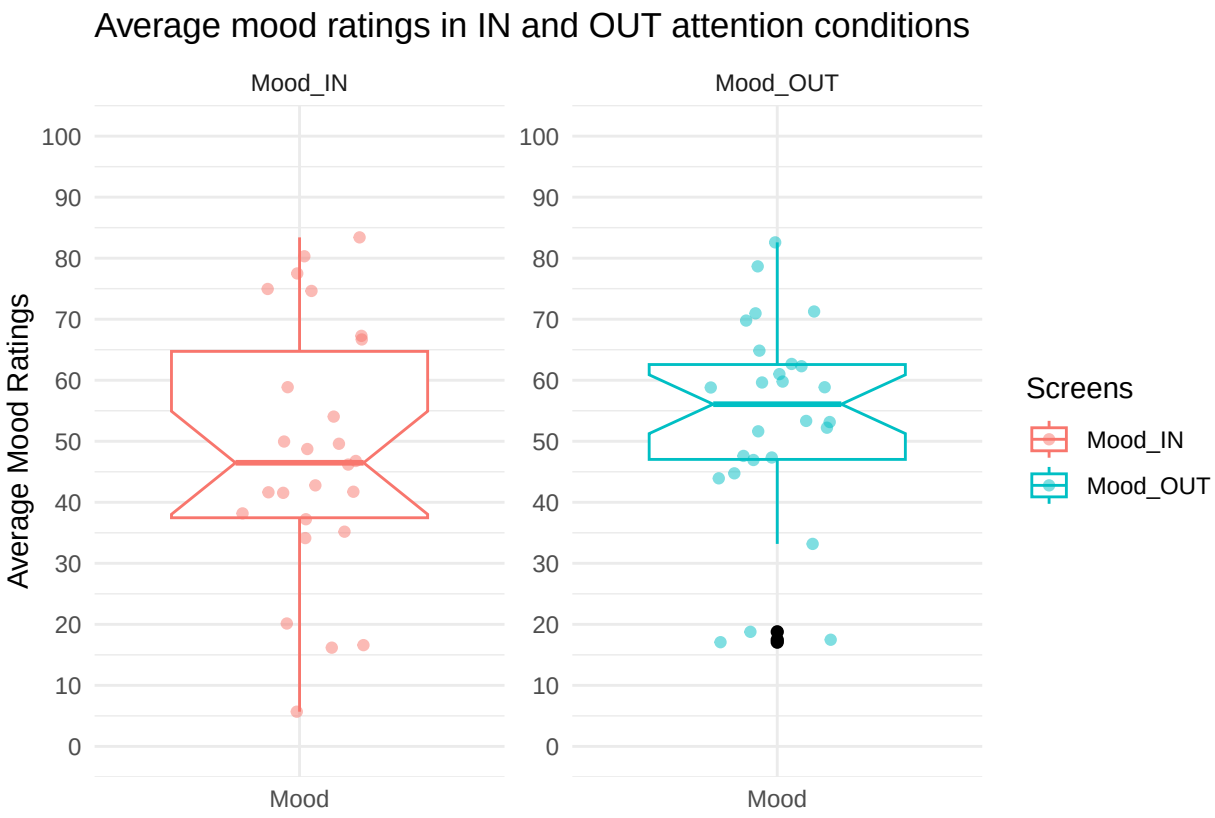
The plot below show the average mood ratings in IN and OUT attention conditions where people paid internal and external attention respectively.



Repeating the group plots after excluding outliers

I have excluded the following subjects to see how the group plots change:"SUPPRF09833", "SUPPRF54499", "SUPPRF50800". They all had rated the same scores for anxiety and mood throughout the task (their histograms above are flat).




Average mood ratings in IN and OUT attention conditions
Mood_IN
Mood_OUT
Average Mood Ratings
100
90
80
70
60
50
40
30
20
10
0
Mood
Mood
Screens
Mood_IN
Mood_OUT

Between condition tests

Since in this version we only had the mood and anxiety ratings without feedback and prediction, let's have a look at between condition differences per emotion rating (Mood and Anxiety) using two paired t-tests. We could look at the slopes for both attention conditions using a model with only the intercept?

```
##
##  Paired t-test
##
## data:  Mood_IN and Mood_OUT
## t = -2.4443, df = 28, p-value = 0.02107
## alternative hypothesis: true mean difference is not equal to 0
## 95 percent confidence interval:
##  -8.7567902 -0.7715971
## sample estimates:
## mean difference
##       -4.764194
```

```
##
##  Paired t-test
##
## data:  Anxiety_IN and Anxiety_OUT
## t = 1.4346, df = 28, p-value = 0.1625
## alternative hypothesis: true mean difference is not equal to 0
## 95 percent confidence interval:
##  -1.282521  7.277064
## sample estimates:
## mean difference
##        2.997272
```