# Surprise study analysis

Marjan Biria

2024-08-19

#### Study description

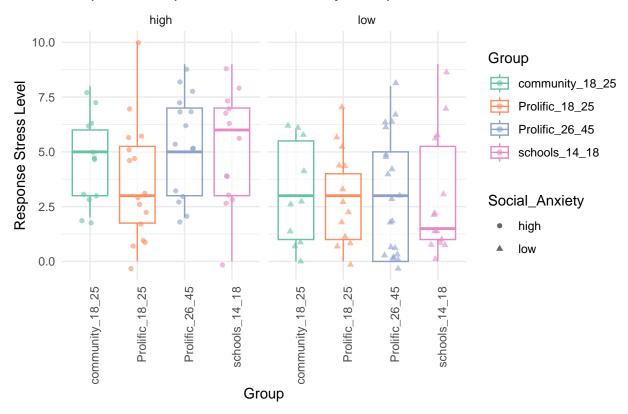
This is the first surprise study using the same task version as pilot 21. We had the following groups of participants with the experiment's corresponding Gorilla link: - Prolific aged 18-25 (n = 30): https://app.gorilla.sc/admin/experiment/180921/design - Prolific aged 26-45 (n = 38): https://app.gorilla.sc/admin/experiment/185160/design - School students aged 14-18 (n = 30): https://app.gorilla.sc/admin/experiment/177048/design - Promunity participants aged 18-25 (n = 24): https://app.gorilla.sc/admin/experiment/180348/design

The sample sizes include participants that potentially need to be excluded.

#### Stress levels per group

It seems that stress levels between high vs low social anxiety groups are different in school kids, prolific participants aged 26-45; in other two groups there seem to be no difference in stress levels.

## Boxplot of Response Stress Level by Group

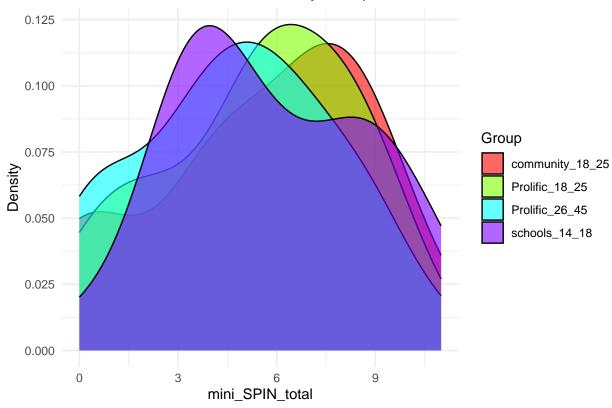


#### Social Anxiety counts per group

It seems that the social anxiety (mini\_SPIN) is quite balanced between groups and the density distribution is quite similar across groups as well. More people aged 18-25 seem to have high mini\_spin scores.

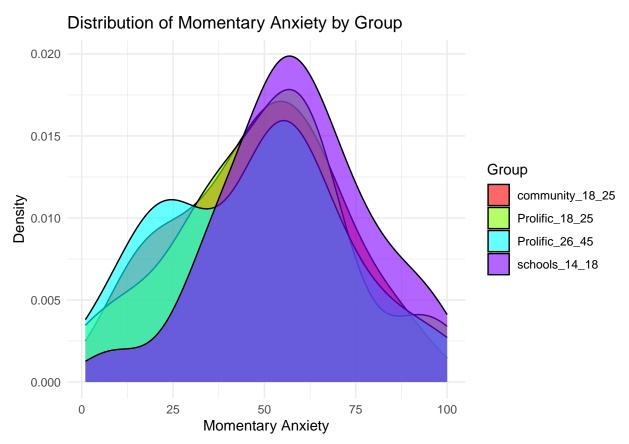
```
## # A tibble: 4 x 3
## # Groups:
               Group [4]
##
     Group
                       high
                              low
     <chr>
                      <dbl> <dbl>
## 1 community_18_25
                         12
                               10
## 2 Prolific_18_25
                         16
                               13
## 3 Prolific_26_45
                         15
                               21
## 4 schools_14_18
                         13
                               14
```

#### Distribution of mini\_SPIN\_total by Group



### Momentary anxiety per group

It seems that some Prolific participants in both age groups reported lower momentary anxiety, but other than that the distribution seems quite similar. The peak seems to be slightly above 50 (all groups slightly more anxious, community and school students more anxious?).



# Momentary mood per group

The peak seems to be slightly below mid point of 50.

