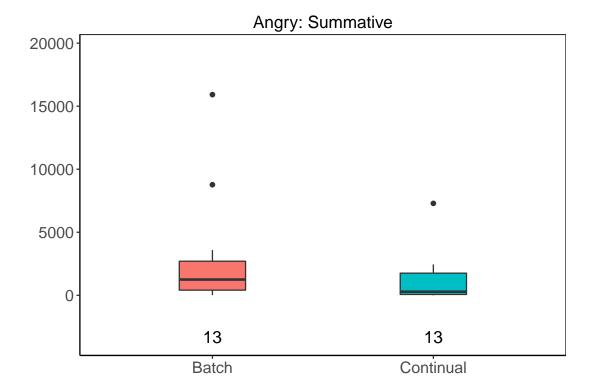
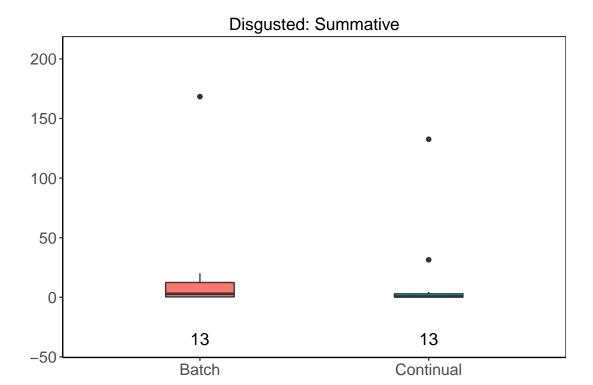
Facs Data - Test

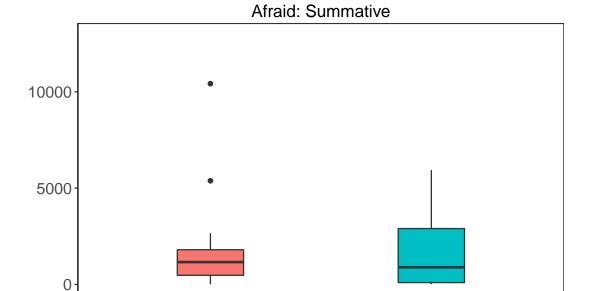
Summative Result - Comparison



```
## [1] "----- NOT NORMAL DISTRIBUTION"
## [1] "----- LOG TRANSFORMED"
## [1] "---- BOTH NORMAL DISTRIBUTION"
## [1] "---- Performed T-Test"
##
## Welch Two Sample t-test
##
## data: batch_data and continual_data
## t = 1.6299, df = 21.828, p-value = 0.1175
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## -0.3979749 3.3136478
## sample estimates:
## mean of x mean of y
## 6.889827 5.431991
```



```
## [1] "---- NOT NORMAL DISTRIBUTION"
## [1] "----- LOG TRANSFORMED"
## [1] "----- BOTH NORMAL DISTRIBUTION"
## [1] "----- Performed T-Test"
##
  Welch Two Sample t-test
##
##
## data: batch_data and continual_data
## t = 1.1529, df = 22.622, p-value = 0.261
\#\# alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## -1.453797 5.107044
## sample estimates:
## mean of x mean of y
## 0.2109121 -1.6157111
```



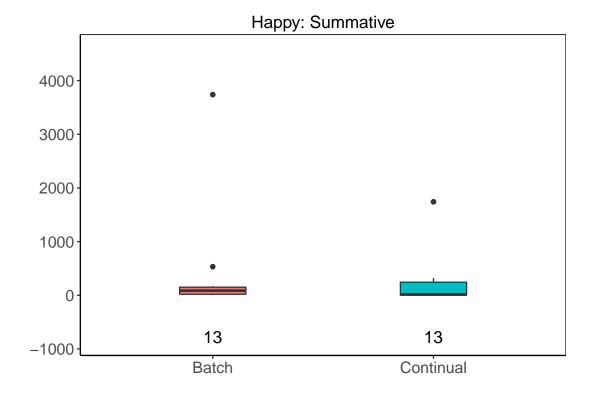
13

Continual

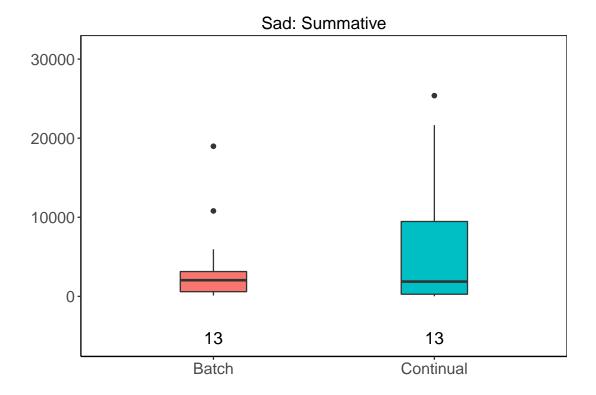
```
## [1] "----- NOT NORMAL DISTRIBUTION"
## [1] "----- BOTH NORMAL DISTRIBUTION"
## [1] "---- BOTH NORMAL DISTRIBUTION"
## [1] "---- Performed T-Test"
##
## Welch Two Sample t-test
##
## data: batch_data and continual_data
## t = 0.66306, df = 22.918, p-value = 0.5139
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## -1.101524 2.140470
## sample estimates:
## mean of x mean of y
## 6.688310 6.168837
```

13

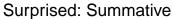
Batch

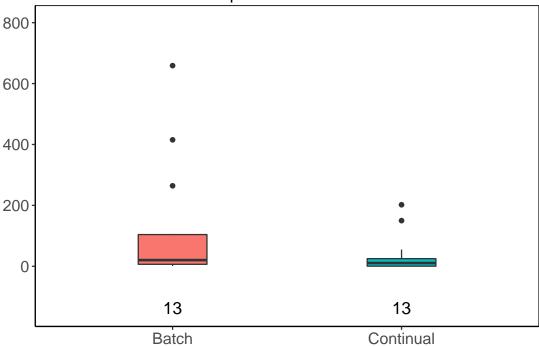


```
## [1] "----- NOT NORMAL DISTRIBUTION"
## [1] "----- BOTH NORMAL DISTRIBUTION"
## [1] "----- BOTH NORMAL DISTRIBUTION"
## [1] "----- Performed T-Test"
##
## Welch Two Sample t-test
##
## data: batch_data and continual_data
## t = 1.438, df = 20.2, p-value = 0.1657
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## -0.652234 3.553075
## sample estimates:
## mean of x mean of y
## 4.182992 2.732572
```

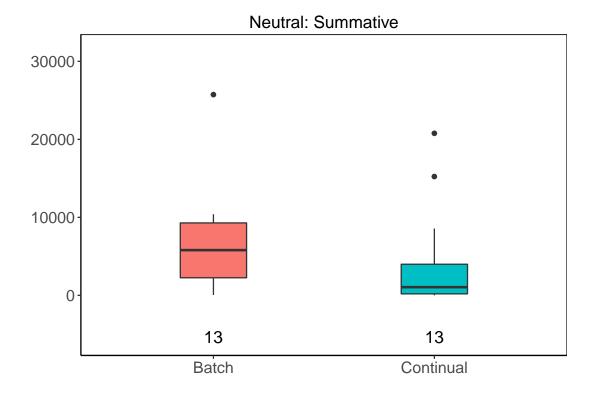


```
## [1] "----- NOT NORMAL DISTRIBUTION"
## [1] "----- BOTH NORMAL DISTRIBUTION"
## [1] "---- BOTH NORMAL DISTRIBUTION"
## [1] "---- Performed T-Test"
##
## Welch Two Sample t-test
##
## data: batch_data and continual_data
## t = 0.48232, df = 19.235, p-value = 0.635
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## -1.338975 2.141734
## sample estimates:
## mean of x mean of y
## 7.421343 7.019963
```



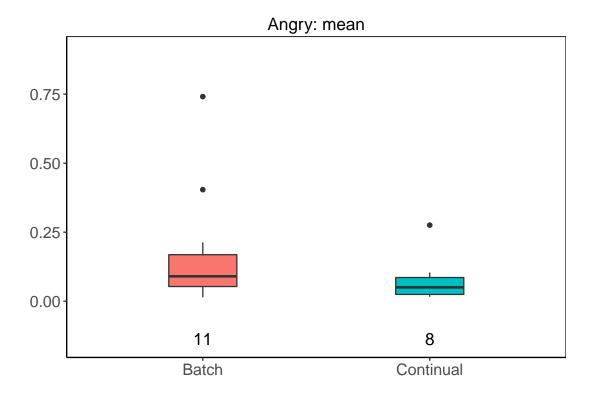


```
## [1] "----- NOT NORMAL DISTRIBUTION"
## [1] "----- LOG TRANSFORMED"
## [1] "---- BOTH NORMAL DISTRIBUTION"
## [1] "---- Performed T-Test"
##
## Welch Two Sample t-test
##
## data: batch_data and continual_data
## t = 1.6606, df = 20.78, p-value = 0.1118
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## -0.464145  4.130975
## sample estimates:
## mean of x mean of y
## 3.140422  1.307007
```

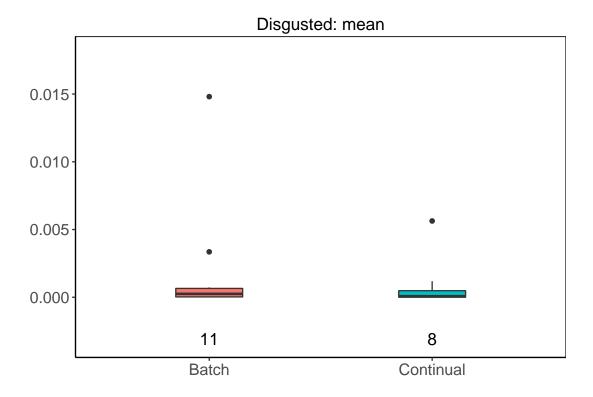


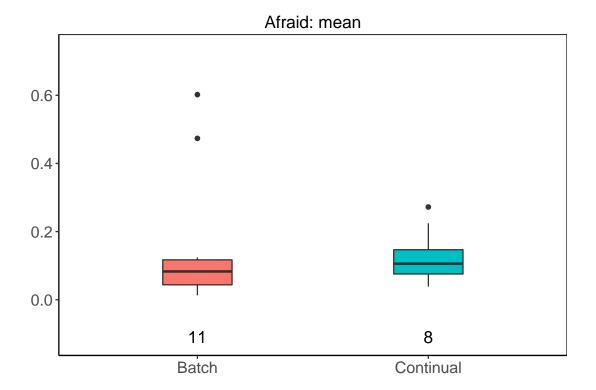
```
## [1] "----- NOT NORMAL DISTRIBUTION"
## [1] "----- LOG TRANSFORMED"
## [1] "---- NOT NORMAL DISTRIBUTION AFTER LOG TRANSFORMATION"
## [1] "Performed Unsigned Rank Test"
##
## Wilcoxon rank sum test
##
## data: batch_data and continual_data
## W = 118, p-value = 0.09085
## alternative hypothesis: true location shift is not equal to 0
```

Mean Result - Comparison

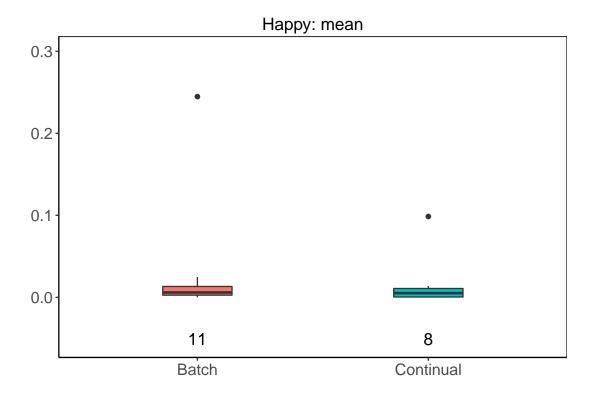


```
## [1] "----- NOT NORMAL DISTRIBUTION"
## [1] "----- BOTH NORMAL DISTRIBUTION"
## [1] "----- BOTH NORMAL DISTRIBUTION"
## [1] "----- Performed T-Test"
##
## Welch Two Sample t-test
##
## data: batch_data and continual_data
## t = 1.4543, df = 16.359, p-value = 0.1648
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## -0.3094014 1.6691460
## sample estimates:
## mean of x mean of y
## -2.291074 -2.970947
```

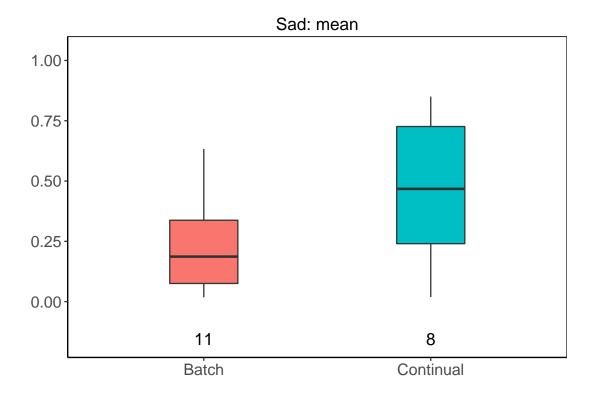




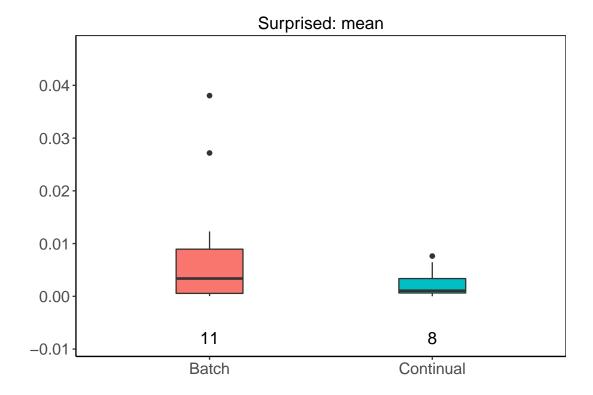
```
## [1] "----- NOT NORMAL DISTRIBUTION"
## [1] "----- BOTH NORMAL DISTRIBUTION"
## [1] "---- BOTH NORMAL DISTRIBUTION"
## [1] "---- Performed T-Test"
##
## Welch Two Sample t-test
##
## data: batch_data and continual_data
## t = -0.61598, df = 16.215, p-value = 0.5465
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## -1.115329    0.612684
## sample estimates:
## mean of x mean of y
## -2.493033    -2.241710
```



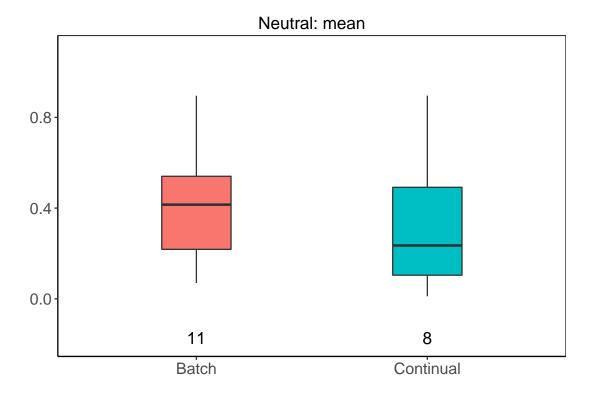
```
## [1] "----- NOT NORMAL DISTRIBUTION"
## [1] "----- BOTH NORMAL DISTRIBUTION"
## [1] "---- BOTH NORMAL DISTRIBUTION"
## [1] "---- Performed T-Test"
##
## Welch Two Sample t-test
##
## data: batch_data and continual_data
## t = 0.74627, df = 13.326, p-value = 0.4685
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## -1.450809 2.987925
## sample estimates:
## mean of x mean of y
## -5.186345 -5.954902
```



```
## [1] "----- BOTH NORMAL DISTRIBUTION"
## [1] "----- Performed T-Test"
##
## Welch Two Sample t-test
##
## data: batch_data and continual_data
## t = -1.8461, df = 11.053, p-value = 0.09181
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## -0.49863115    0.04357921
## sample estimates:
## mean of x mean of y
## 0.2304129    0.4579388
```

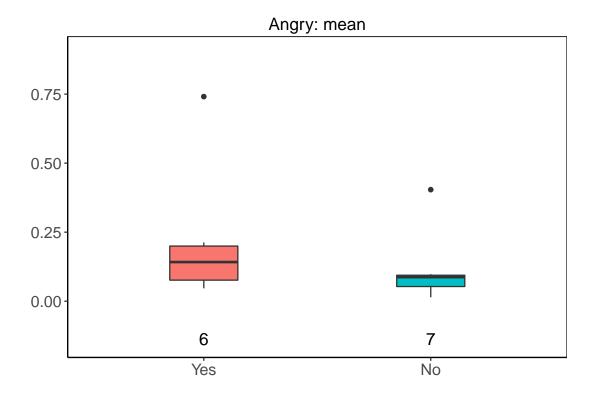


```
## [1] "----- NOT NORMAL DISTRIBUTION"
## [1] "----- BOTH NORMAL DISTRIBUTION"
## [1] "----- BOTH NORMAL DISTRIBUTION"
## [1] "----- Performed T-Test"
##
## Welch Two Sample t-test
##
## data: batch_data and continual_data
## t = 0.82373, df = 15.261, p-value = 0.4228
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## -1.352413   3.060312
## sample estimates:
## mean of x mean of y
## -6.252378 -7.106327
```

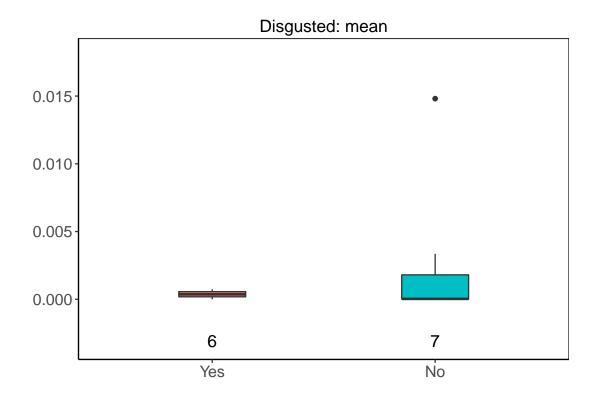


```
## [1] "------ BOTH NORMAL DISTRIBUTION"
## [1] "----- Performed T-Test"
##
## Welch Two Sample t-test
##
## data: batch_data and continual_data
## t = 0.6644, df = 12.759, p-value = 0.5183
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## -0.1923863  0.3628012
## sample estimates:
## mean of x mean of y
## 0.4030569  0.3178494
```

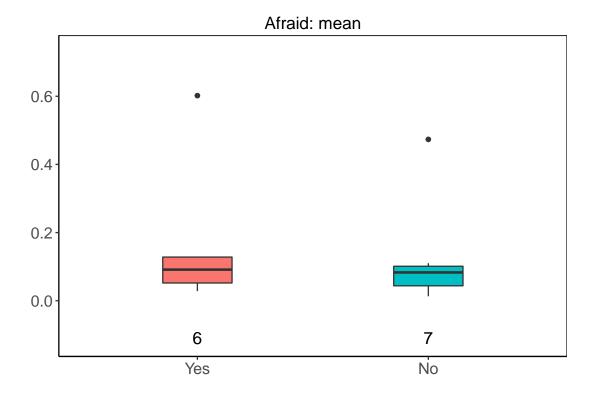
Glass Result - Comparison



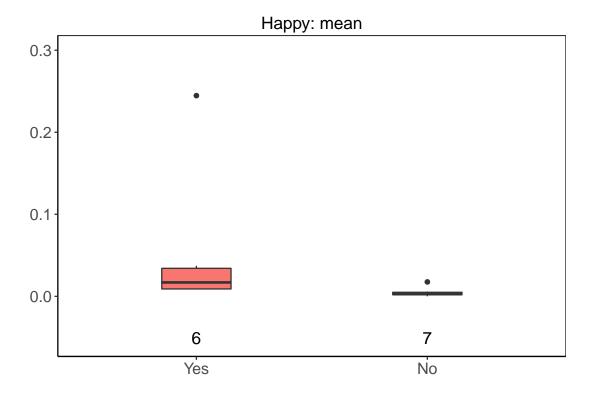
```
## [1] "---- NOT NORMAL DISTRIBUTION"
## [1] "----- LOG TRANSFORMED"
## [1] "----- BOTH NORMAL DISTRIBUTION"
## [1] "----- Performed T-Test"
##
  Welch Two Sample t-test
##
##
## data: with_glass_data and without_glass_data
## t = 1.1944, df = 10.724, p-value = 0.2581
\mbox{\tt \#\#} alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## -0.5600589 1.8801513
## sample estimates:
## mean of x mean of y
## -1.940247 -2.600293
```



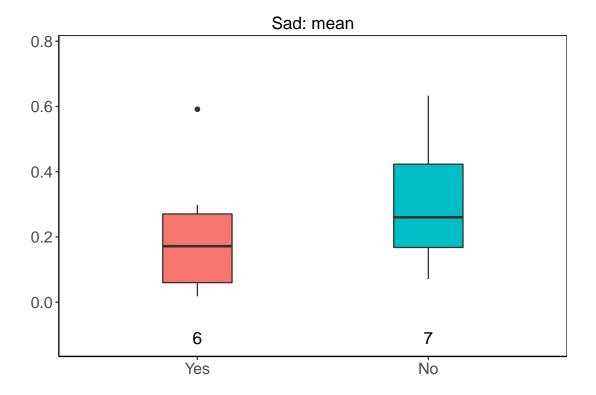
```
## [1] "----- NOT NORMAL DISTRIBUTION"
## [1] "----- LOG TRANSFORMED"
## [1] "---- NOT NORMAL DISTRIBUTION AFTER LOG TRANSFORMATION"
## [1] "Performed Unsigned Rank Test"
##
## Wilcoxon rank sum test
##
## data: with_glass_data and without_glass_data
## W = 23, p-value = 0.8357
## alternative hypothesis: true location shift is not equal to 0
```



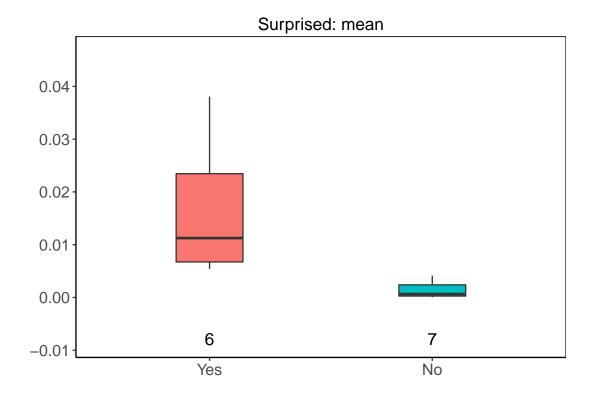
```
## [1] "---- NOT NORMAL DISTRIBUTION"
## [1] "----- LOG TRANSFORMED"
## [1] "----- BOTH NORMAL DISTRIBUTION"
## [1] "----- Performed T-Test"
##
  Welch Two Sample t-test
##
##
## data: with_glass_data and without_glass_data
## t = 0.48568, df = 10.791, p-value = 0.6369
\#\# alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## -1.035351 1.619886
## sample estimates:
## mean of x mean of y
## -2.339799 -2.632066
```



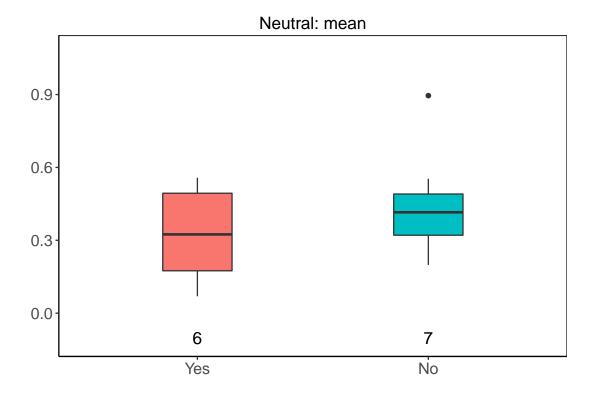
```
## [1] "---- NOT NORMAL DISTRIBUTION"
## [1] "----- LOG TRANSFORMED"
## [1] "----- BOTH NORMAL DISTRIBUTION"
## [1] "----- Performed T-Test"
##
  Welch Two Sample t-test
##
##
## data: with_glass_data and without_glass_data
## t = 2.8224, df = 10.962, p-value = 0.01665
\mbox{\tt \#\#} alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## 0.507416 4.108848
## sample estimates:
## mean of x mean of y
## -3.759651 -6.067783
```



```
## [1] "----- BOTH NORMAL DISTRIBUTION"
## [1] "----- Performed T-Test"
##
## Welch Two Sample t-test
##
## data: with_glass_data and without_glass_data
## t = -0.80667, df = 10.495, p-value = 0.4378
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## -0.3497185    0.1629309
## sample estimates:
## mean of x mean of y
## 0.2131178    0.3065116
```

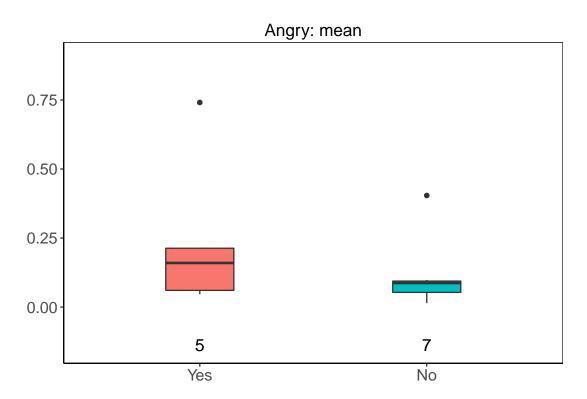


```
## [1] "------ BOTH NORMAL DISTRIBUTION"
## [1] "------ Performed T-Test"
##
## Welch Two Sample t-test
##
## data: with_glass_data and without_glass_data
## t = 2.7525, df = 5.1344, p-value = 0.03907
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## 0.001100523 0.028890545
## sample estimates:
## mean of x mean of y
## 0.016448430 0.001452895
```

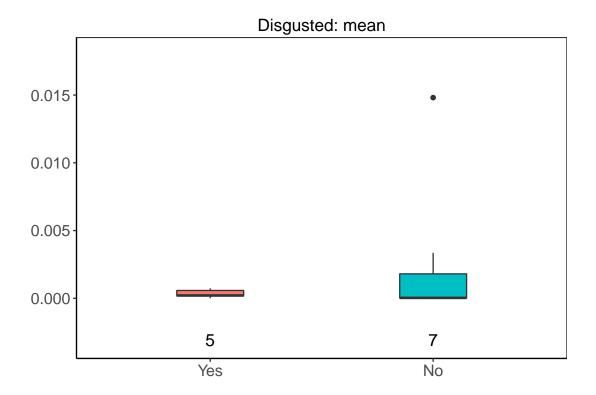


Glass Result - Removing Subjects

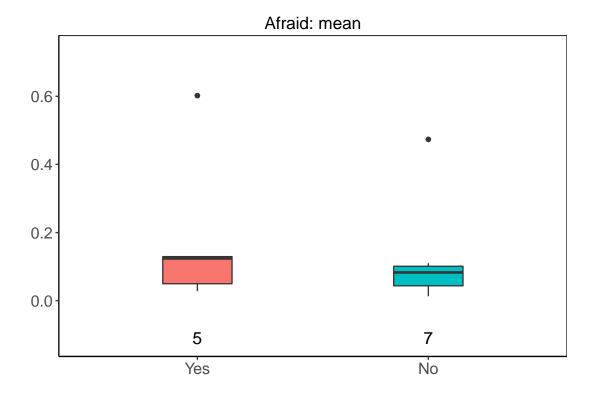
```
## [1] "~~~~~~"
## [1] "Removing Participant: T021"
## [1] "~~~~~~"
```



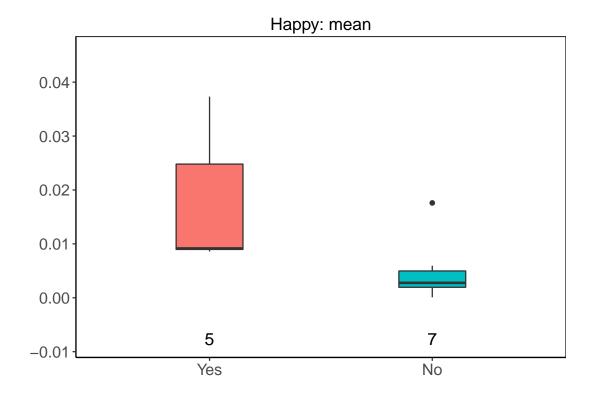
```
## [1] "----- NOT NORMAL DISTRIBUTION"
## [1] "----- LOG TRANSFORMED"
## [1] "---- BOTH NORMAL DISTRIBUTION"
## [1] "---- Performed T-Test"
##
## Welch Two Sample t-test
##
## data: with_glass_data and without_glass_data
## t = 1.1106, df = 8.176, p-value = 0.2983
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## -0.7370333 2.1163960
## sample estimates:
## mean of x mean of y
## -1.910612 -2.600293
```



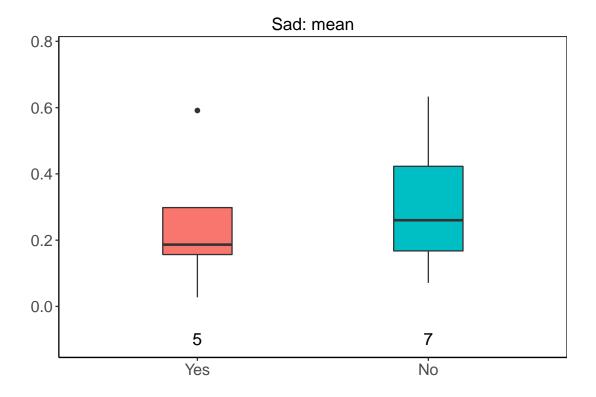
```
## [1] "----- NOT NORMAL DISTRIBUTION"
## [1] "----- LOG TRANSFORMED"
## [1] "---- NOT NORMAL DISTRIBUTION AFTER LOG TRANSFORMATION"
## [1] "Performed Unsigned Rank Test"
##
## Wilcoxon rank sum test
##
## data: with_glass_data and without_glass_data
## W = 18, p-value = 1
## alternative hypothesis: true location shift is not equal to 0
```



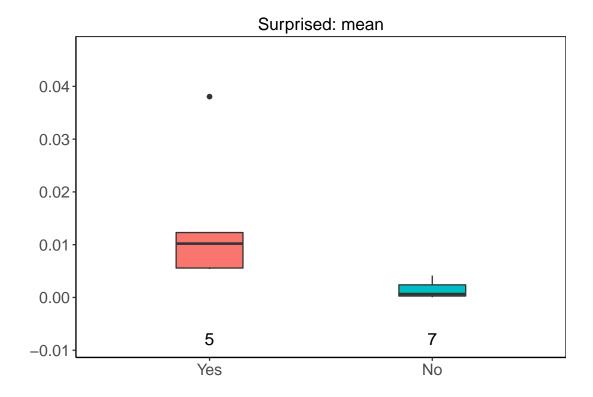
```
## [1] "---- NOT NORMAL DISTRIBUTION"
## [1] "----- LOG TRANSFORMED"
## [1] "----- BOTH NORMAL DISTRIBUTION"
## [1] "----- Performed T-Test"
##
  Welch Two Sample t-test
##
##
## data: with_glass_data and without_glass_data
## t = 0.58988, df = 8.4493, p-value = 0.5707
\#\# alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## -1.126856 1.911195
## sample estimates:
## mean of x mean of y
## -2.239897 -2.632066
```



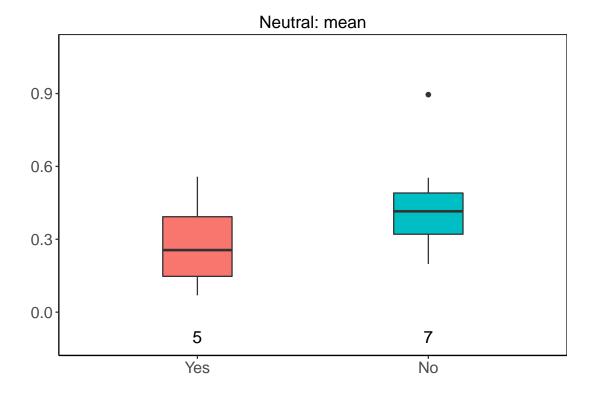
```
## [1] "---- NOT NORMAL DISTRIBUTION"
## [1] "----- LOG TRANSFORMED"
## [1] "----- BOTH NORMAL DISTRIBUTION"
## [1] "----- Performed T-Test"
##
  Welch Two Sample t-test
##
##
## data: with_glass_data and without_glass_data
## t = 2.6548, df = 8.5471, p-value = 0.02743
\#\# alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## 0.2590856 3.4164883
## sample estimates:
## mean of x mean of y
## -4.229996 -6.067783
```



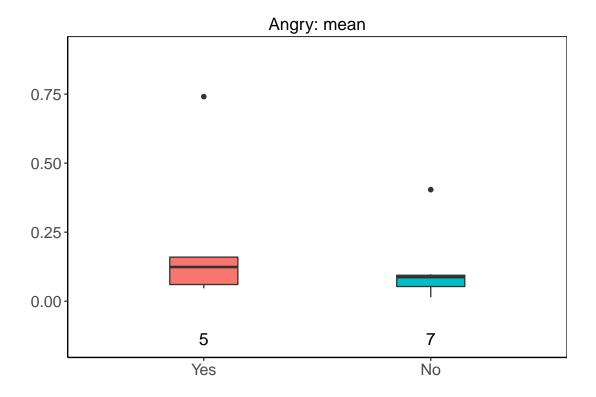
```
## [1] "------ BOTH NORMAL DISTRIBUTION"
## [1] "------ Performed T-Test"
##
## Welch Two Sample t-test
##
## data: with_glass_data and without_glass_data
## t = -0.44548, df = 8.479, p-value = 0.6671
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## -0.3331017 0.2243512
## sample estimates:
## mean of x mean of y
## 0.2521363 0.3065116
```



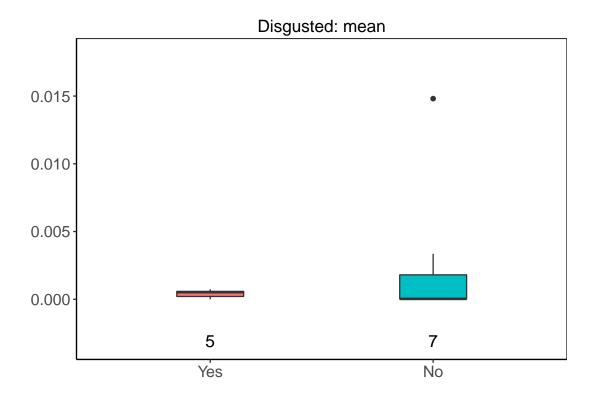
```
## [1] "---- NOT NORMAL DISTRIBUTION"
## [1] "----- LOG TRANSFORMED"
## [1] "----- BOTH NORMAL DISTRIBUTION"
## [1] "----- Performed T-Test"
##
  Welch Two Sample t-test
##
##
## data: with_glass_data and without_glass_data
## t = 3.8662, df = 8.7941, p-value = 0.003981
\#\# alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## 1.213771 4.666932
## sample estimates:
## mean of x mean of y
## -4.533151 -7.473502
```



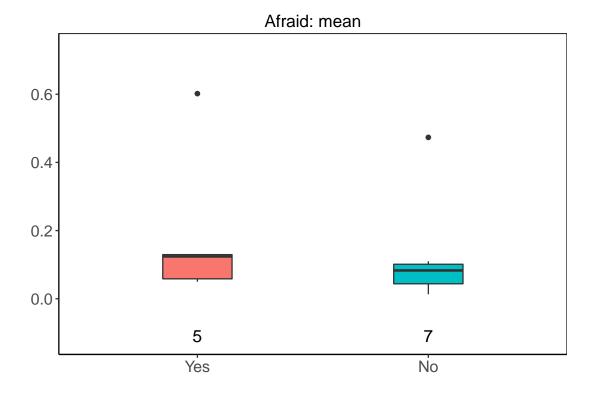
```
## [1] "---- BOTH NORMAL DISTRIBUTION"
## [1] "----- Performed T-Test"
##
## Welch Two Sample t-test
##
## data: with_glass_data and without_glass_data
## t = -1.3187, df = 9.6113, p-value = 0.2178
\#\# alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## -0.4395680 0.1138303
## sample estimates:
## mean of x mean of y
## 0.2845594 0.4474283
##
## [1] "----"
## [1] "Removing Participant: T051"
## [1] "----"
```



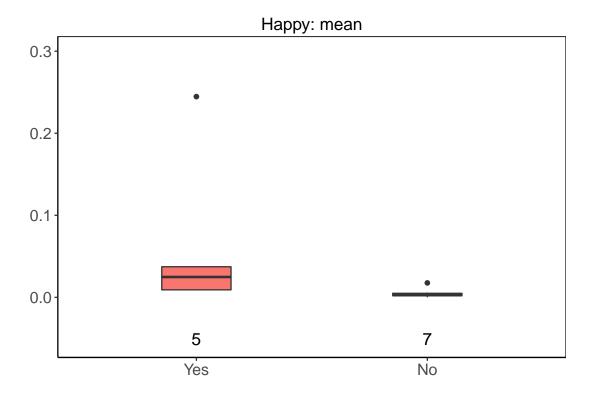
```
## [1] "---- NOT NORMAL DISTRIBUTION"
## [1] "----- LOG TRANSFORMED"
## [1] "----- BOTH NORMAL DISTRIBUTION"
## [1] "----- Performed T-Test"
##
  Welch Two Sample t-test
##
##
## data: with_glass_data and without_glass_data
## t = 0.94585, df = 8.276, p-value = 0.371
\mbox{\tt \#\#} alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## -0.8276939 1.9902282
## sample estimates:
## mean of x mean of y
## -2.019026 -2.600293
```



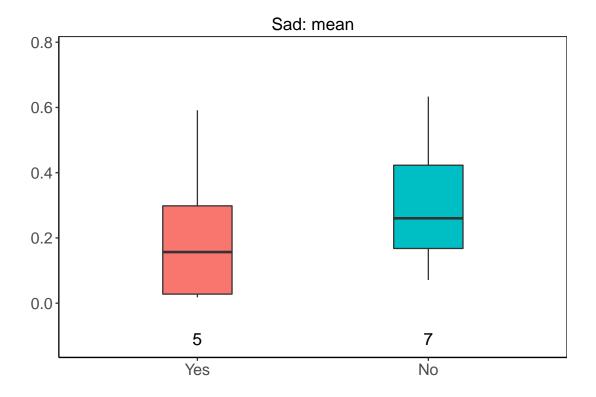
```
## [1] "----- NOT NORMAL DISTRIBUTION"
## [1] "----- LOG TRANSFORMED"
## [1] "---- NOT NORMAL DISTRIBUTION AFTER LOG TRANSFORMATION"
## [1] "Performed Unsigned Rank Test"
##
## Wilcoxon rank sum test
##
## data: with_glass_data and without_glass_data
## W = 19, p-value = 0.8763
## alternative hypothesis: true location shift is not equal to 0
```

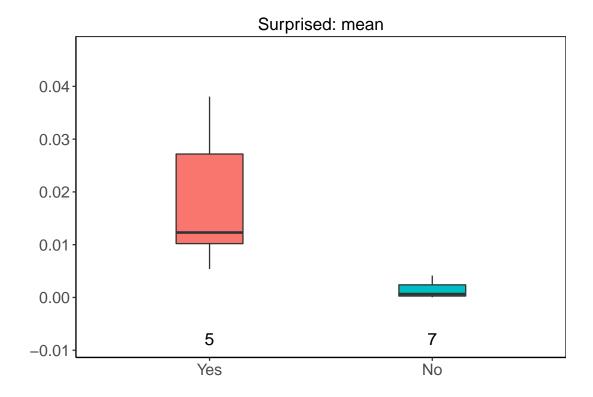


```
## [1] "---- NOT NORMAL DISTRIBUTION"
## [1] "----- LOG TRANSFORMED"
## [1] "----- BOTH NORMAL DISTRIBUTION"
## [1] "----- Performed T-Test"
##
  Welch Two Sample t-test
##
##
## data: with_glass_data and without_glass_data
## t = 0.88738, df = 9.3431, p-value = 0.3971
\#\# alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## -0.824995 1.899872
## sample estimates:
## mean of x mean of y
## -2.094628 -2.632066
```

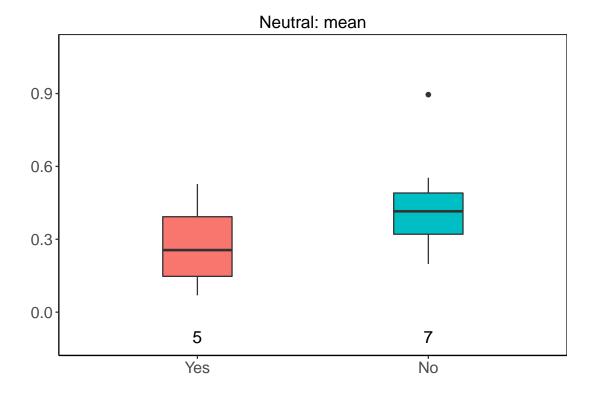


```
## [1] "---- NOT NORMAL DISTRIBUTION"
## [1] "----- LOG TRANSFORMED"
## [1] "----- BOTH NORMAL DISTRIBUTION"
## [1] "----- Performed T-Test"
##
  Welch Two Sample t-test
##
##
## data: with_glass_data and without_glass_data
## t = 2.8734, df = 9.6599, p-value = 0.01714
\mbox{\tt \#\#} alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## 0.5518635 4.4461124
## sample estimates:
## mean of x mean of y
## -3.568795 -6.067783
```

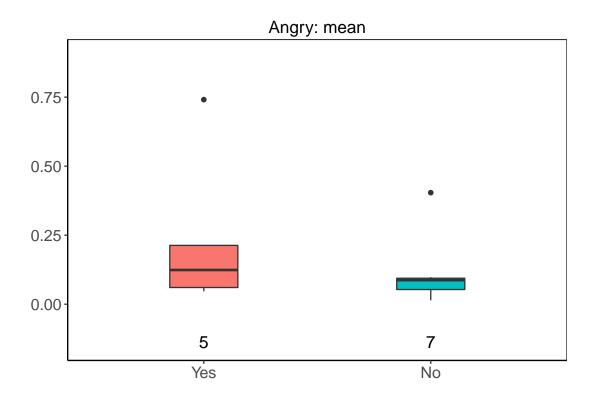




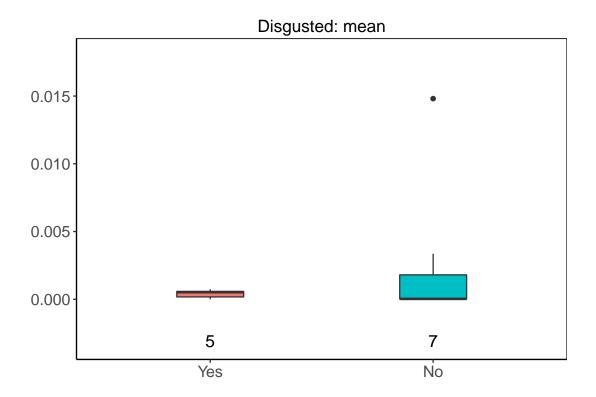
```
## [1] "------ BOTH NORMAL DISTRIBUTION"
## [1] "------ Performed T-Test"
##
## Welch Two Sample t-test
##
## data: with_glass_data and without_glass_data
## t = 2.814, df = 4.0855, p-value = 0.04697
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## 0.0003681726 0.0339722738
## sample estimates:
## mean of x mean of y
## 0.018623119 0.001452895
```



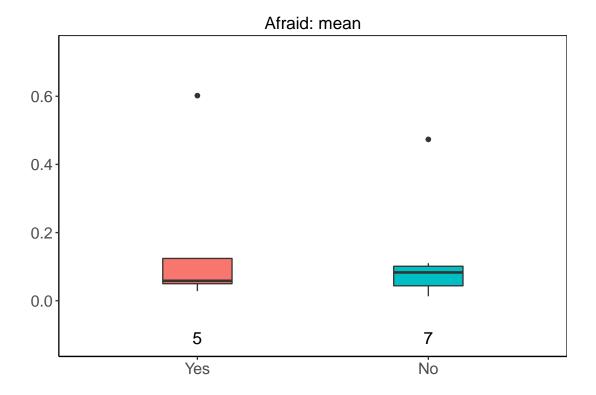
```
## [1] "---- BOTH NORMAL DISTRIBUTION"
## [1] "----- Performed T-Test"
##
##
  Welch Two Sample t-test
##
## data: with_glass_data and without_glass_data
## t = -1.4042, df = 9.7927, p-value = 0.1912
\#\# alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## -0.43766750 0.09987887
## sample estimates:
## mean of x mean of y
## 0.2785340 0.4474283
##
## [1] "----"
## [1] "Removing Participant: T077"
## [1] "----"
```



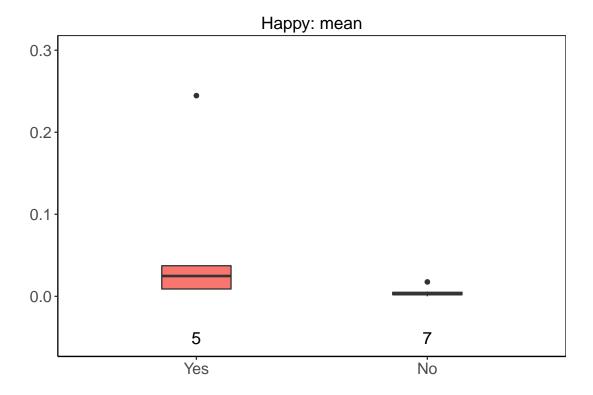
```
## [1] "----- NOT NORMAL DISTRIBUTION"
## [1] "----- BOTH NORMAL DISTRIBUTION"
## [1] "---- BOTH NORMAL DISTRIBUTION"
## [1] "---- Performed T-Test"
##
## Welch Two Sample t-test
##
## data: with_glass_data and without_glass_data
## t = 1.028, df = 8.168, p-value = 0.3334
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## -0.7892324 2.0670650
## sample estimates:
## mean of x mean of y
## -1.961377 -2.600293
```



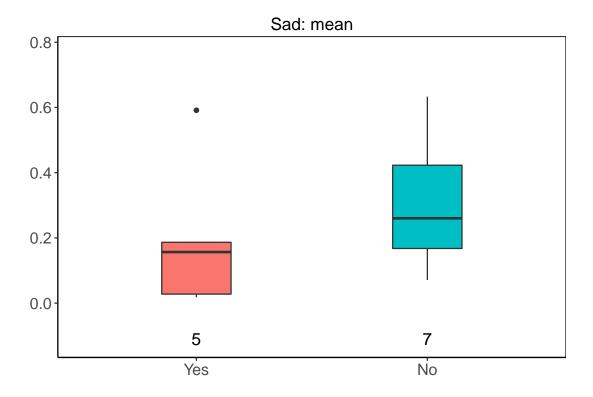
```
## [1] "----- NOT NORMAL DISTRIBUTION"
## [1] "----- LOG TRANSFORMED"
## [1] "---- NOT NORMAL DISTRIBUTION AFTER LOG TRANSFORMATION"
## [1] "Performed Unsigned Rank Test"
##
## Wilcoxon rank sum test
##
## data: with_glass_data and without_glass_data
## W = 19, p-value = 0.8763
## alternative hypothesis: true location shift is not equal to 0
```



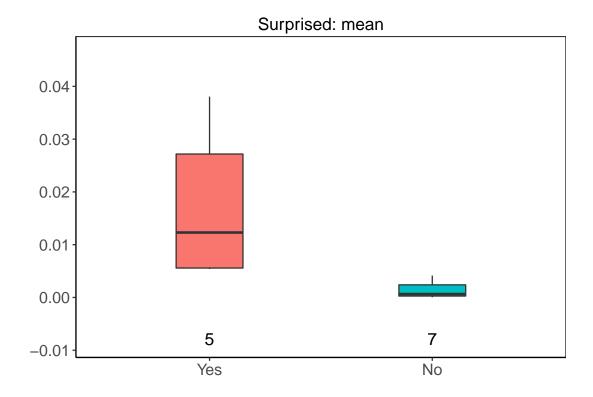
```
## [1] "---- NOT NORMAL DISTRIBUTION"
## [1] "----- LOG TRANSFORMED"
## [1] "----- BOTH NORMAL DISTRIBUTION"
## [1] "----- Performed T-Test"
##
  Welch Two Sample t-test
##
##
## data: with_glass_data and without_glass_data
## t = 0.34687, df = 8.3437, p-value = 0.7373
\#\# alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## -1.305700 1.771966
## sample estimates:
## mean of x mean of y
## -2.398933 -2.632066
```



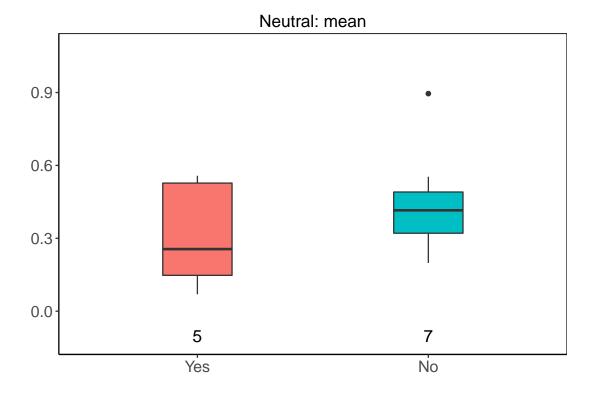
```
## [1] "---- NOT NORMAL DISTRIBUTION"
## [1] "----- LOG TRANSFORMED"
## [1] "----- BOTH NORMAL DISTRIBUTION"
## [1] "----- Performed T-Test"
##
  Welch Two Sample t-test
##
##
## data: with_glass_data and without_glass_data
## t = 2.8646, df = 9.6492, p-value = 0.01741
\mbox{\tt \#\#} alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## 0.5447559 4.4453515
## sample estimates:
## mean of x mean of y
## -3.572729 -6.067783
```



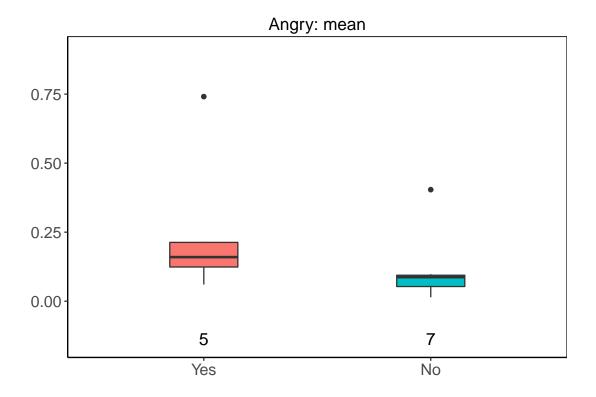
```
## [1] "----- BOTH NORMAL DISTRIBUTION"
## [1] "----- Performed T-Test"
##
## Welch Two Sample t-test
##
## data: with_glass_data and without_glass_data
## t = -0.85345, df = 7.9235, p-value = 0.4185
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## -0.4093593    0.1884737
## sample estimates:
## mean of x mean of y
## 0.1960688    0.3065116
```



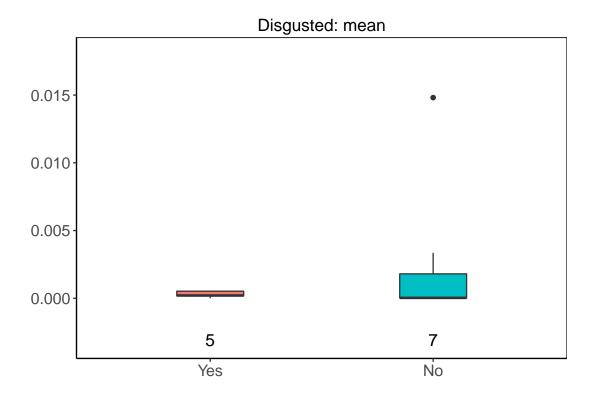
```
## [1] "----- BOTH NORMAL DISTRIBUTION"
## [1] "----- Performed T-Test"
##
## Welch Two Sample t-test
##
## data: with_glass_data and without_glass_data
## t = 2.507, df = 4.0757, p-value = 0.06512
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## -0.001614741  0.034103533
## sample estimates:
## mean of x mean of y
## 0.017697291  0.001452895
```



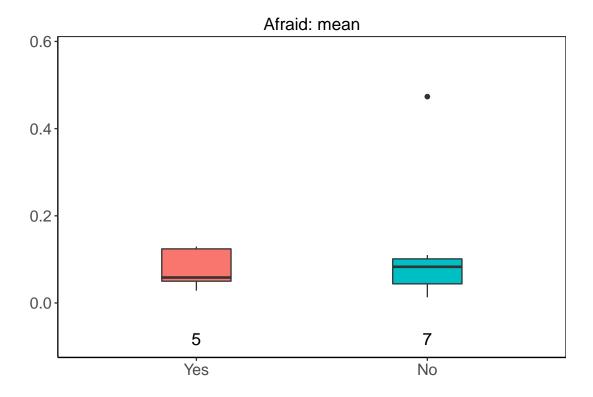
```
## [1] "---- BOTH NORMAL DISTRIBUTION"
## [1] "----- Performed T-Test"
##
## Welch Two Sample t-test
##
## data: with_glass_data and without_glass_data
## t = -1.03, df = 9.0233, p-value = 0.3298
\#\# alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## -0.4345440 0.1625549
## sample estimates:
## mean of x mean of y
## 0.3114337 0.4474283
##
## [1] "----"
## [1] "Removing Participant: T079"
## [1] "----"
```



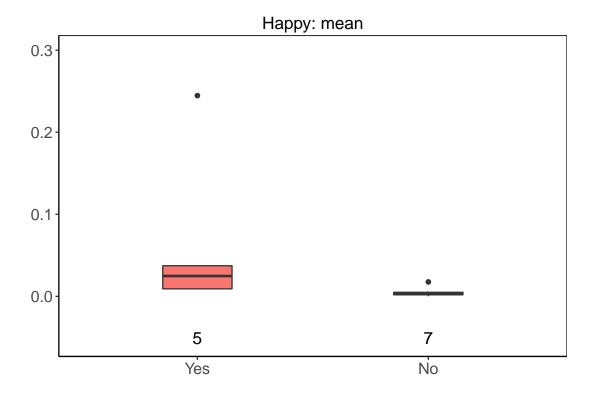
```
## [1] "---- NOT NORMAL DISTRIBUTION"
## [1] "----- LOG TRANSFORMED"
## [1] "----- BOTH NORMAL DISTRIBUTION"
## [1] "----- Performed T-Test"
##
  Welch Two Sample t-test
##
##
## data: with_glass_data and without_glass_data
## t = 1.5869, df = 9.2152, p-value = 0.1462
\mbox{\tt \#\#} alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## -0.3721189 2.1421972
## sample estimates:
## mean of x mean of y
## -1.715254 -2.600293
```



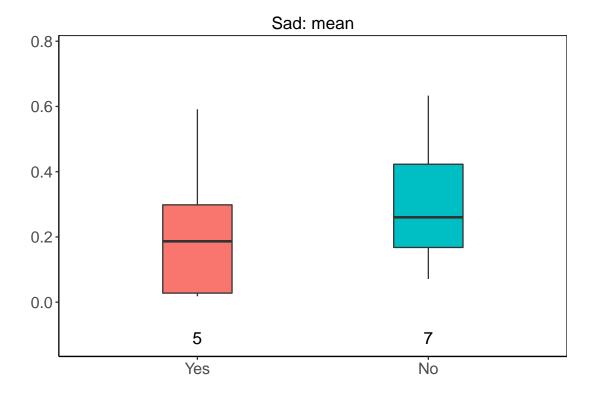
```
## [1] "----- NOT NORMAL DISTRIBUTION"
## [1] "----- LOG TRANSFORMED"
## [1] "---- NOT NORMAL DISTRIBUTION AFTER LOG TRANSFORMATION"
## [1] "Performed Unsigned Rank Test"
##
## Wilcoxon rank sum test
##
## data: with_glass_data and without_glass_data
## W = 18, p-value = 1
## alternative hypothesis: true location shift is not equal to 0
```



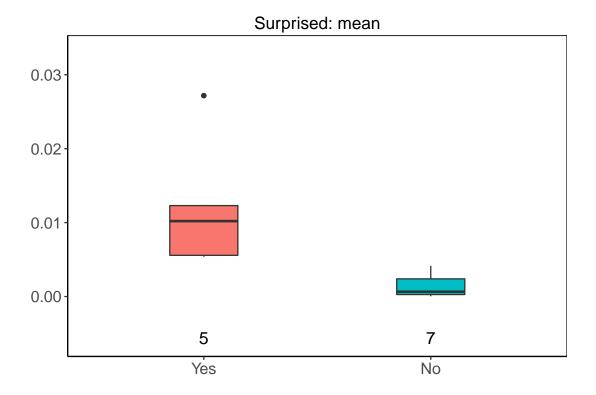
```
## [1] "---- NOT NORMAL DISTRIBUTION"
## [1] "----- LOG TRANSFORMED"
## [1] "----- BOTH NORMAL DISTRIBUTION"
## [1] "----- Performed T-Test"
##
  Welch Two Sample t-test
##
##
## data: with_glass_data and without_glass_data
## t = -0.14665, df = 9.773, p-value = 0.8864
\#\# alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## -1.204146 1.055863
## sample estimates:
## mean of x mean of y
## -2.706208 -2.632066
```

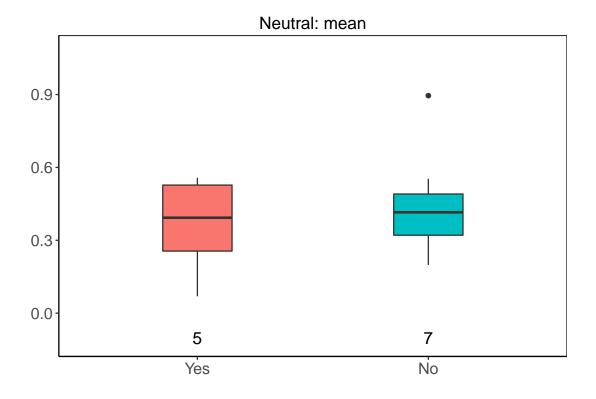


```
## [1] "---- NOT NORMAL DISTRIBUTION"
## [1] "----- LOG TRANSFORMED"
## [1] "----- BOTH NORMAL DISTRIBUTION"
## [1] "----- Performed T-Test"
##
  Welch Two Sample t-test
##
##
## data: with_glass_data and without_glass_data
## t = 2.8927, df = 9.6836, p-value = 0.01655
\mbox{\tt \#\#} alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## 0.5674709 4.4475325
## sample estimates:
## mean of x mean of y
## -3.560281 -6.067783
```

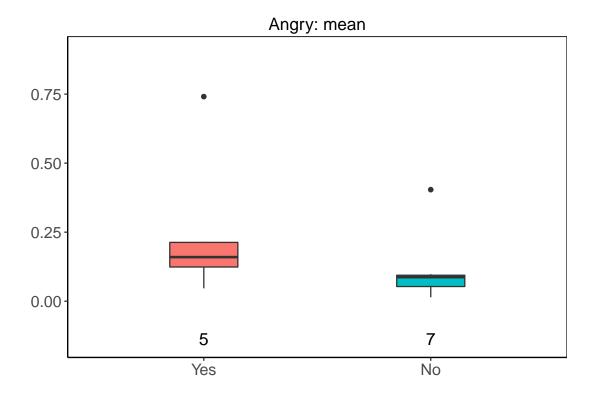


```
## [1] "------ BOTH NORMAL DISTRIBUTION"
## [1] "------ Performed T-Test"
##
## Welch Two Sample t-test
##
## data: with_glass_data and without_glass_data
## t = -0.62988, df = 7.8573, p-value = 0.5466
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## -0.3836451  0.2194354
## sample estimates:
## mean of x mean of y
## 0.2244068  0.3065116
```

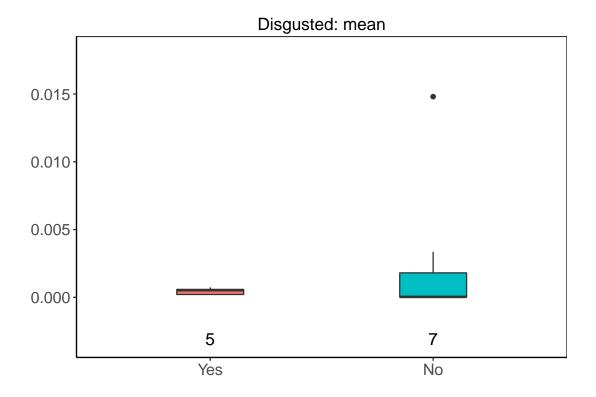




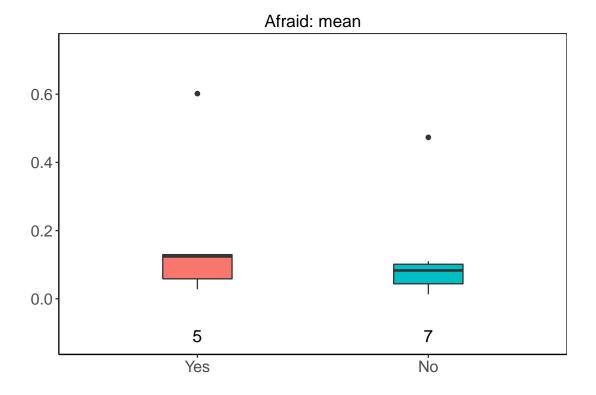
```
## [1] "---- BOTH NORMAL DISTRIBUTION"
## [1] "----- Performed T-Test"
##
##
  Welch Two Sample t-test
##
## data: with_glass_data and without_glass_data
## t = -0.69102, df = 9.4659, p-value = 0.5061
\#\# alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## -0.3692784 0.1954702
## sample estimates:
## mean of x mean of y
## 0.3605242 0.4474283
##
## [1] "----"
## [1] "Removing Participant: T139"
## [1] "----"
```



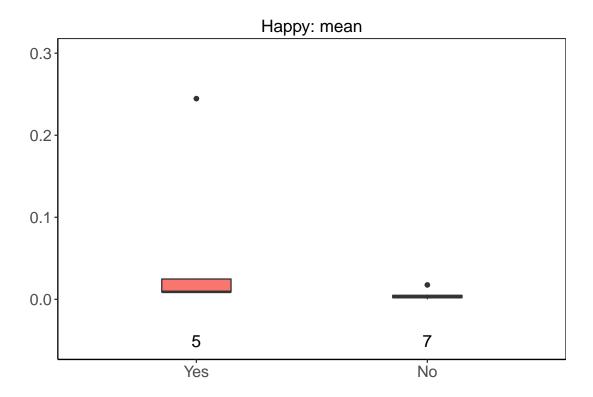
```
## [1] "----- NOT NORMAL DISTRIBUTION"
## [1] "----- BOTH NORMAL DISTRIBUTION"
## [1] "---- BOTH NORMAL DISTRIBUTION"
## [1] "---- Performed T-Test"
##
## Welch Two Sample t-test
##
## data: with_glass_data and without_glass_data
## t = 1.4254, df = 8.7613, p-value = 0.1887
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## -0.4948043 2.1616443
## sample estimates:
## mean of x mean of y
## -1.766873 -2.600293
```



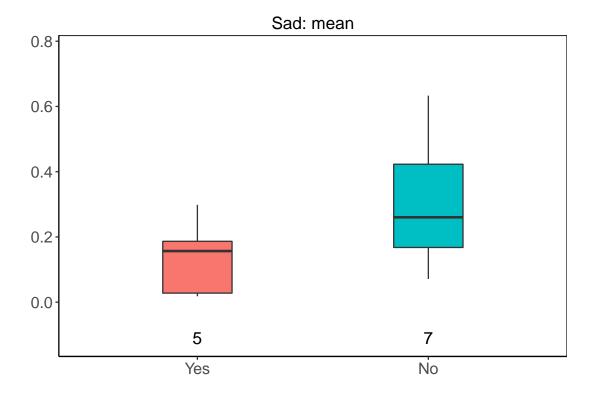
```
## [1] "----- NOT NORMAL DISTRIBUTION"
## [1] "----- LOG TRANSFORMED"
## [1] "---- BOTH NORMAL DISTRIBUTION"
## [1] "---- Performed T-Test"
##
## Welch Two Sample t-test
##
## data: with_glass_data and without_glass_data
## t = 0.94554, df = 6.6944, p-value = 0.3773
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## -1.773537 4.100781
## sample estimates:
## mean of x mean of y
## -7.872137 -9.035760
```



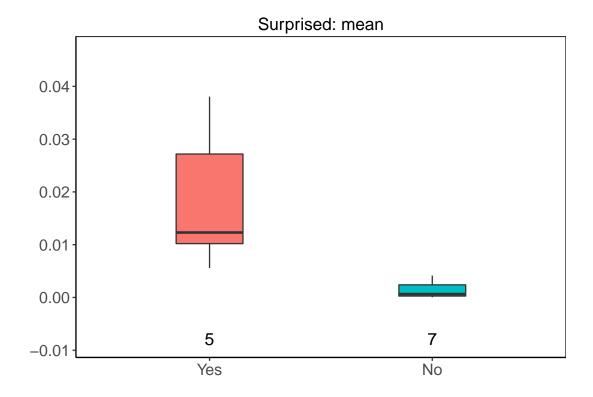
```
## [1] "---- NOT NORMAL DISTRIBUTION"
## [1] "----- LOG TRANSFORMED"
## [1] "----- BOTH NORMAL DISTRIBUTION"
## [1] "----- Performed T-Test"
##
  Welch Two Sample t-test
##
##
## data: with_glass_data and without_glass_data
## t = 0.64491, df = 8.5707, p-value = 0.5359
\#\# alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## -1.073337 1.920261
## sample estimates:
## mean of x mean of y
## -2.208604 -2.632066
```



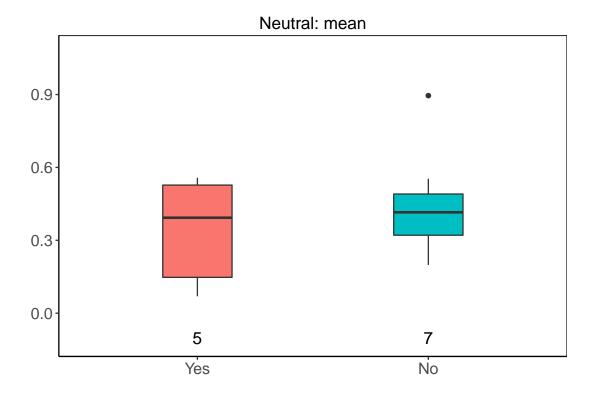
```
## [1] "----- NOT NORMAL DISTRIBUTION"
## [1] "----- LOG TRANSFORMED"
## [1] "---- NOT NORMAL DISTRIBUTION AFTER LOG TRANSFORMATION"
## [1] "Performed Unsigned Rank Test"
##
## Wilcoxon rank sum test
##
## data: with_glass_data and without_glass_data
## W = 32, p-value = 0.01768
## alternative hypothesis: true location shift is not equal to 0
```



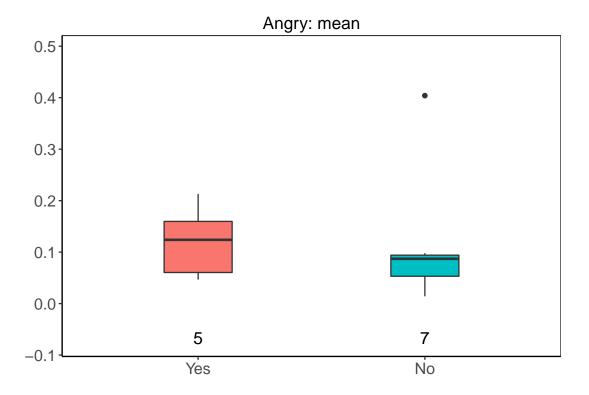
```
## [1] "----- BOTH NORMAL DISTRIBUTION"
## [1] "----- Performed T-Test"
##
## Welch Two Sample t-test
##
## data: with_glass_data and without_glass_data
## t = -1.8232, df = 9.7389, p-value = 0.09907
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## -0.37639534    0.03830146
## sample estimates:
## mean of x mean of y
## 0.1374647    0.3065116
```



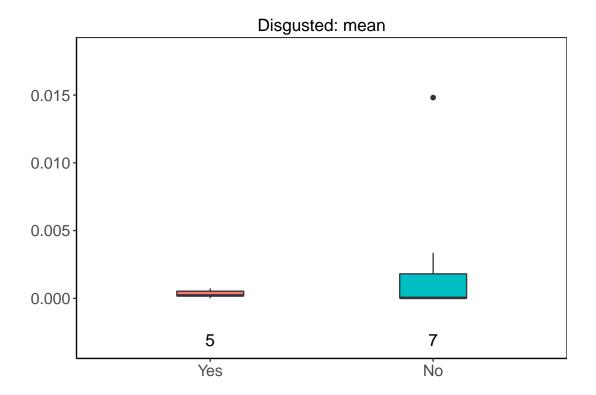
```
## [1] "----- BOTH NORMAL DISTRIBUTION"
## [1] "----- Performed T-Test"
##
## Welch Two Sample t-test
##
## data: with_glass_data and without_glass_data
## t = 2.83, df = 4.0861, p-value = 0.04619
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## 0.0004650931 0.0339525189
## sample estimates:
## mean of x mean of y
## 0.018661701 0.001452895
```



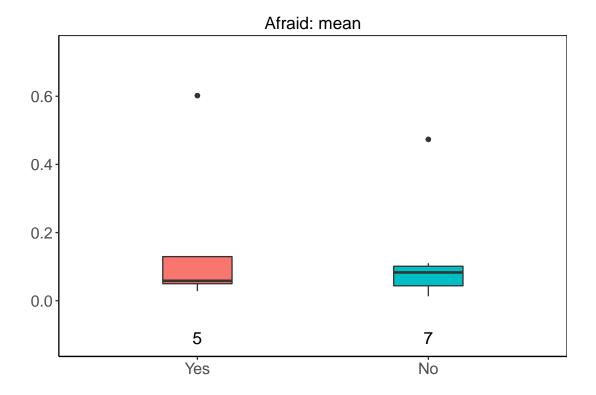
```
## [1] "---- BOTH NORMAL DISTRIBUTION"
## [1] "----- Performed T-Test"
##
## Welch Two Sample t-test
##
## data: with_glass_data and without_glass_data
## t = -0.82227, df = 9.0269, p-value = 0.4321
\#\# alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## -0.4069414 0.1898986
## sample estimates:
## mean of x mean of y
## 0.3389069 0.4474283
##
## [1] "----"
## [1] "Removing Participant: T144"
## [1] "----"
```



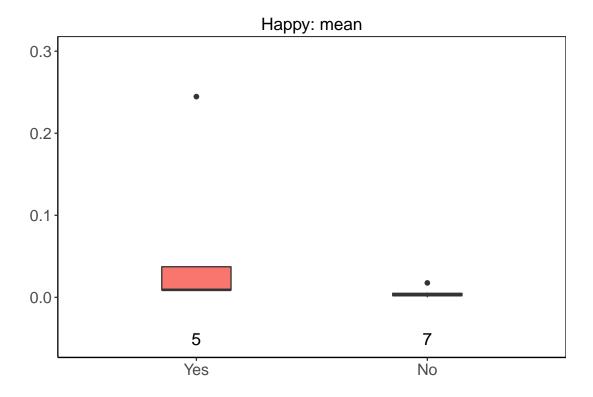
```
## [1] "---- NOT NORMAL DISTRIBUTION"
## [1] "----- LOG TRANSFORMED"
## [1] "----- BOTH NORMAL DISTRIBUTION"
## [1] "----- Performed T-Test"
##
  Welch Two Sample t-test
##
##
## data: with_glass_data and without_glass_data
## t = 0.69903, df = 9.9617, p-value = 0.5005
\#\# alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## -0.7266921 1.3905987
## sample estimates:
## mean of x mean of y
## -2.268340 -2.600293
```



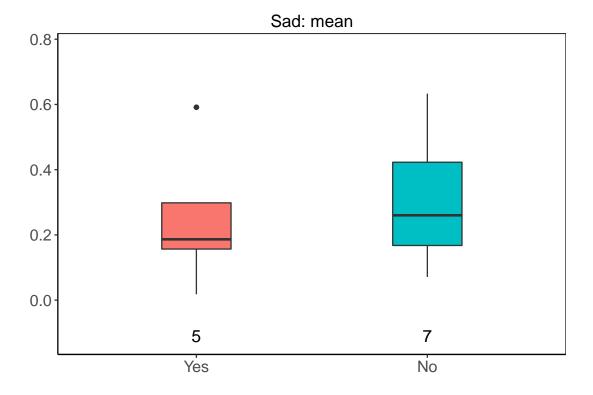
```
## [1] "----- NOT NORMAL DISTRIBUTION"
## [1] "----- LOG TRANSFORMED"
## [1] "---- NOT NORMAL DISTRIBUTION AFTER LOG TRANSFORMATION"
## [1] "Performed Unsigned Rank Test"
##
## Wilcoxon rank sum test
##
## data: with_glass_data and without_glass_data
## W = 18, p-value = 1
## alternative hypothesis: true location shift is not equal to 0
```



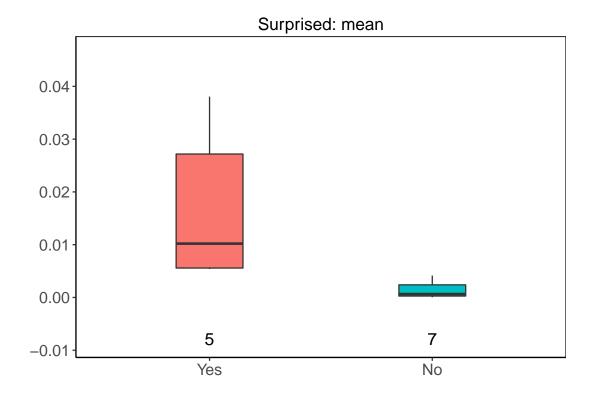
```
## [1] "---- NOT NORMAL DISTRIBUTION"
## [1] "----- LOG TRANSFORMED"
## [1] "----- BOTH NORMAL DISTRIBUTION"
## [1] "----- Performed T-Test"
##
  Welch Two Sample t-test
##
##
## data: with_glass_data and without_glass_data
## t = 0.35883, df = 8.3289, p-value = 0.7286
\#\# alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## -1.300103 1.783191
## sample estimates:
## mean of x mean of y
## -2.390522 -2.632066
```



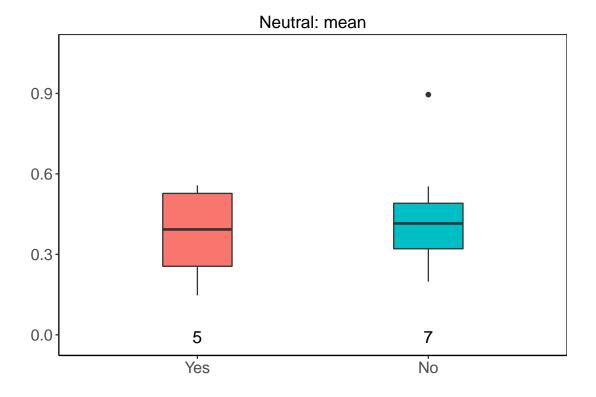
```
## [1] "----- NOT NORMAL DISTRIBUTION"
## [1] "----- LOG TRANSFORMED"
## [1] "Performed Unsigned Rank Test"
##
## Wilcoxon rank sum test
##
## data: with_glass_data and without_glass_data
## W = 32, p-value = 0.01768
## alternative hypothesis: true location shift is not equal to 0
```



```
## [1] "------ BOTH NORMAL DISTRIBUTION"
## [1] "------ Performed T-Test"
##
## Welch Two Sample t-test
##
## data: with_glass_data and without_glass_data
## t = -0.45794, df = 8.4075, p-value = 0.6586
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## -0.3374804 0.2248648
## sample estimates:
## mean of x mean of y
## 0.2502038 0.3065116
```



```
## [1] "------ BOTH NORMAL DISTRIBUTION"
## [1] "------ Performed T-Test"
##
## Welch Two Sample t-test
##
## data: with_glass_data and without_glass_data
## t = 2.405, df = 4.0734, p-value = 0.0728
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## -0.002314829  0.033963808
## sample estimates:
## mean of x mean of y
## 0.017277385  0.001452895
```



```
## [1] "------ BOTH NORMAL DISTRIBUTION"
## [1] "------ Performed T-Test"
##
## Welch Two Sample t-test
##
## data: with_glass_data and without_glass_data
## t = -0.60726, df = 9.9151, p-value = 0.5573
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## -0.3332708  0.1906479
## sample estimates:
## mean of x mean of y
## 0.3761168  0.4474283
```