Behavioural Data Playmore EEG

Marta Topor

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# Demographic Information

|  | Touch Screen | Eye Tracker |
| --- | --- | --- |
| N | 9 | 9 |
| Age Median | 7 | 6 |
| Age Min | 6 | 6 |
| Age Max | 8 | 7 |
| Male % | 44 | 78 |
| Female % | 56 | 22 |
| Year 0 % | 33 | 67 |
| Year 1 % | 67 | 33 |
| Bilingual % | 22 | 22 |
| Right Handed % | 78 | 100 |
| Left Handed % | 22 | 0 |

**Comments:** There are a couple of issues with the demographics of both groups:

* In the eye-tracker group, most participants are boys
* In the touch-screen group, most participants are from grade 1 and in the eye-tracker group, from grade 0. We have tried to balance this out as well as we could.

Statistical comparisons of intervention data will be adjusted for age using a GLM approach that is consistent with the model that is used to regress out confounds in Fieldtrip.

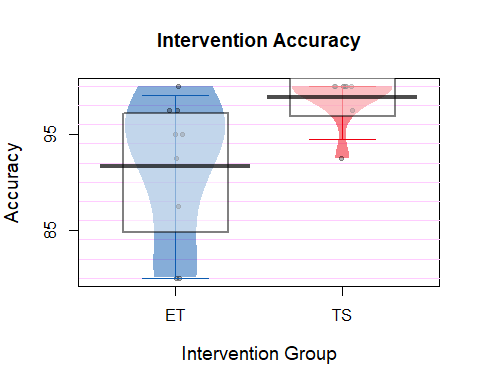
# Intervention Details

Two participants were removed from the RT and DT comparisons because of Touch Screen failure and responses being pressed with the mouse. This led to inaccurate RTs. Thereofre, for RT and DT measures, there are 7 participants in the touch-screen group and 9 participants in the eye-tracker group.

|  | Touch Screen | Eye Tracker |
| --- | --- | --- |
| Training Accuracy Median | 99.51 | 94.48 |
| Training Accuracy Min | 91.97 | 79.39 |
| Training Accuracy Max | 99.64 | 99.64 |
| Training Correct RT | 2842.78 | 2538.58 |
| Training Correct DT | 1752.40 | 2061.42 |

#### Intervention Accuracy Comparison

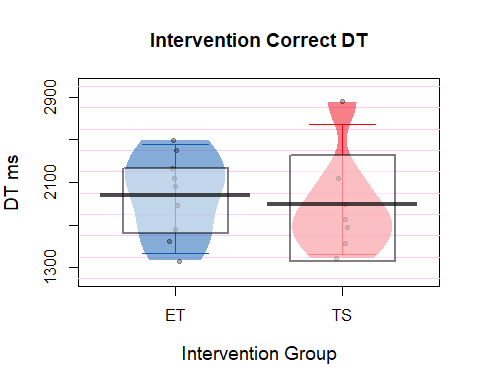
##   
## INDEPENDENT SAMPLES T-TEST  
##   
## Independent Samples T-Test   
## ------------------------------------------------------------------------------------------------------------------------------------   
## Statistic error % df p Effect Size   
## ------------------------------------------------------------------------------------------------------------------------------------   
## Train\_acc\_cor Student's t -2.705584 16.00000 0.0155926 Cohen's d -1.275424   
## Bayes factor10 3.793486 3.505457e-6   
## Mann-Whitney U 14.00000 0.0209436 Rank biserial correlation 0.6543210   
## ------------------------------------------------------------------------------------------------------------------------------------



#### Intervention Correct Answer Decision Time Comparison

This is the time from stimulus onset to space bar release.

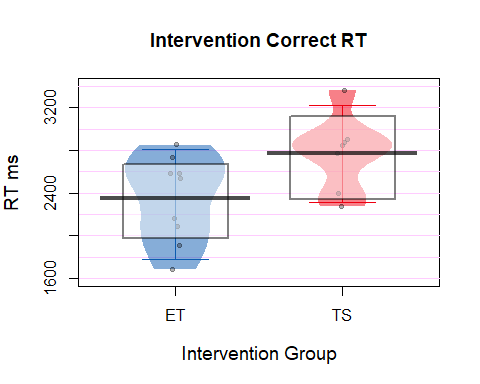
##   
## INDEPENDENT SAMPLES T-TEST  
##   
## Independent Samples T-Test   
## ----------------------------------------------------------------------------------------------------------------------------------------   
## Statistic error % df p Effect Size   
## ----------------------------------------------------------------------------------------------------------------------------------------   
## Train\_corr\_DT\_cor Student's t 0.3883022 14.00000 0.7036331 Cohen's d 0.1956859   
## Bayes factor10 0.4523524 8.781938e-6   
## Mann-Whitney U 26.00000 0.6064685 Rank biserial correlation 0.1746032   
## ----------------------------------------------------------------------------------------------------------------------------------------



#### Intervention Correct Answer Reaction Time Comparison

This is the time from stimulus onset to response.

##   
## INDEPENDENT SAMPLES T-TEST  
##   
## Independent Samples T-Test   
## ----------------------------------------------------------------------------------------------------------------------------------------   
## Statistic error % df p Effect Size   
## ----------------------------------------------------------------------------------------------------------------------------------------   
## Train\_corr\_RT\_cor Student's t -2.207753 14.00000 0.0444493 Cohen's d -1.112603   
## Bayes factor10 1.891168 4.851037e-5   
## Mann-Whitney U 12.00000 0.0417832 Rank biserial correlation 0.6190476   
## ----------------------------------------------------------------------------------------------------------------------------------------



**Corrected p-values** for accuracy, RT and DT respectively: 0.0626748, 0.0626748, 0.6064685