# Data Screening ICMPC15

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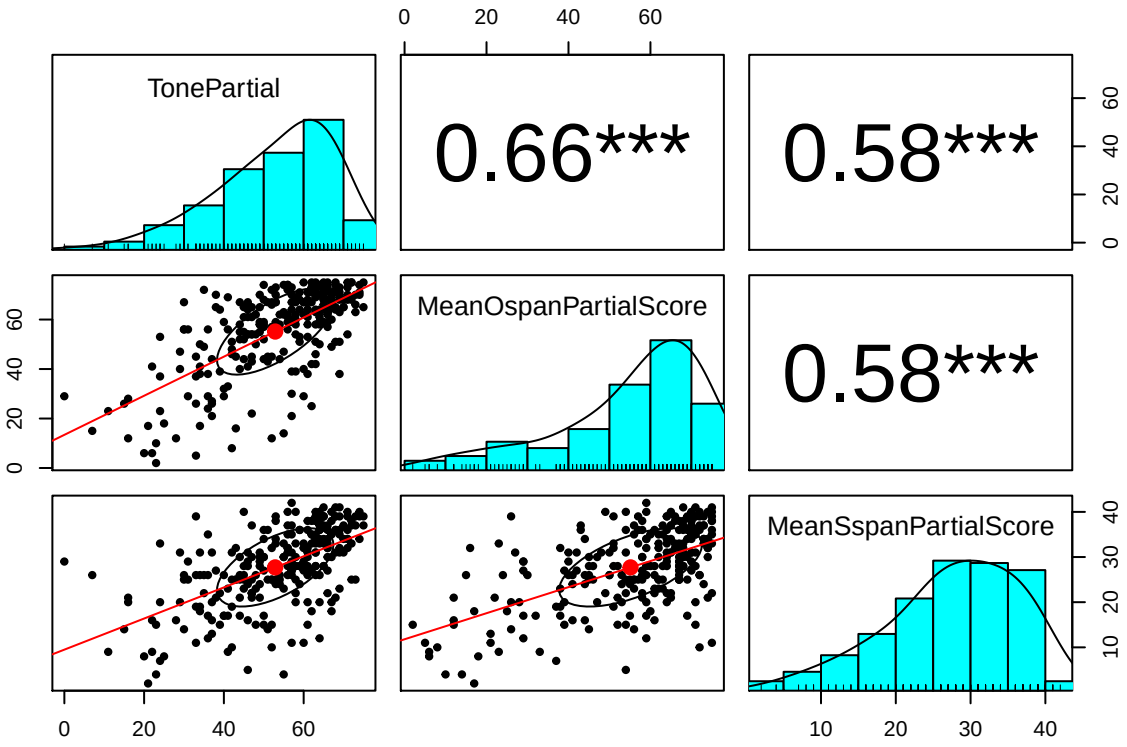
Data Screening Report

## Boring Cleaning Stuff

There's a whole bunch of stuff you can't see in the markdown for cleaning here...

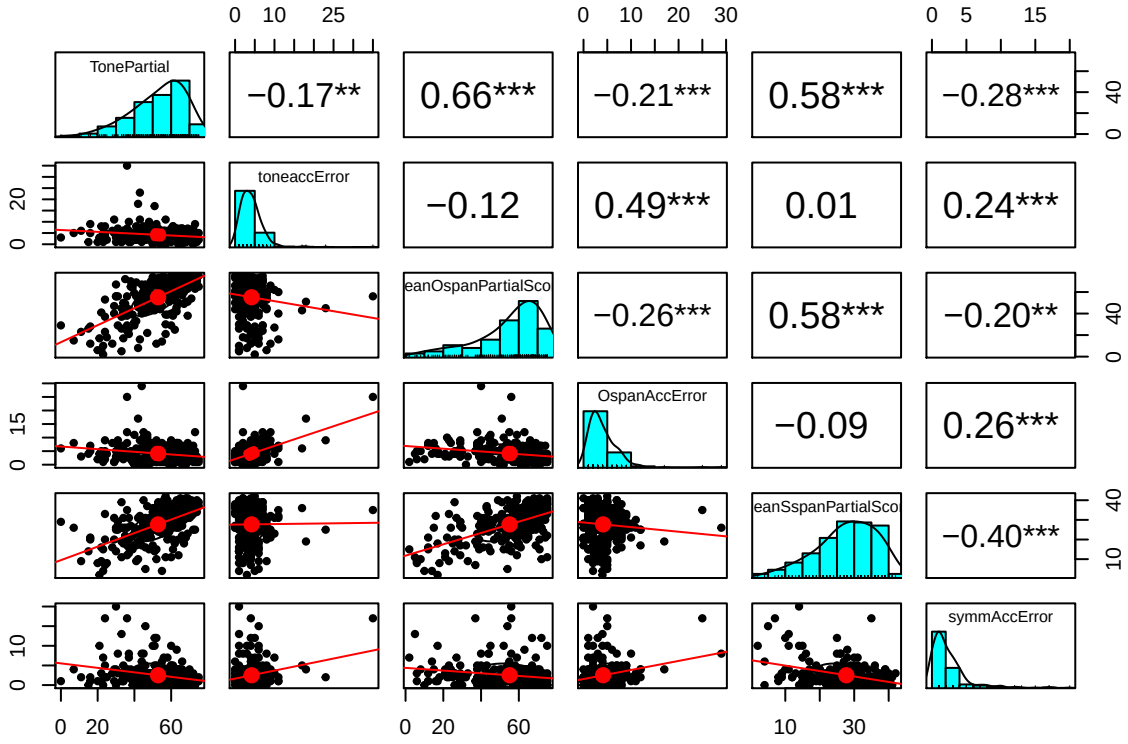
## Cognitive Variable Checking

```
# Check for Proper Correlations (Unsworth, 2009)
# Need sig positive correaltion between SymSpan, Ospan, TSpan -- All measuring WMC

wmc <- master[, .(TonePartial,
                  MeanOspanPartialScore,
                  MeanSspanPartialScore)]
pairs.panels(wmc, lm = TRUE, stars = TRUE)
```

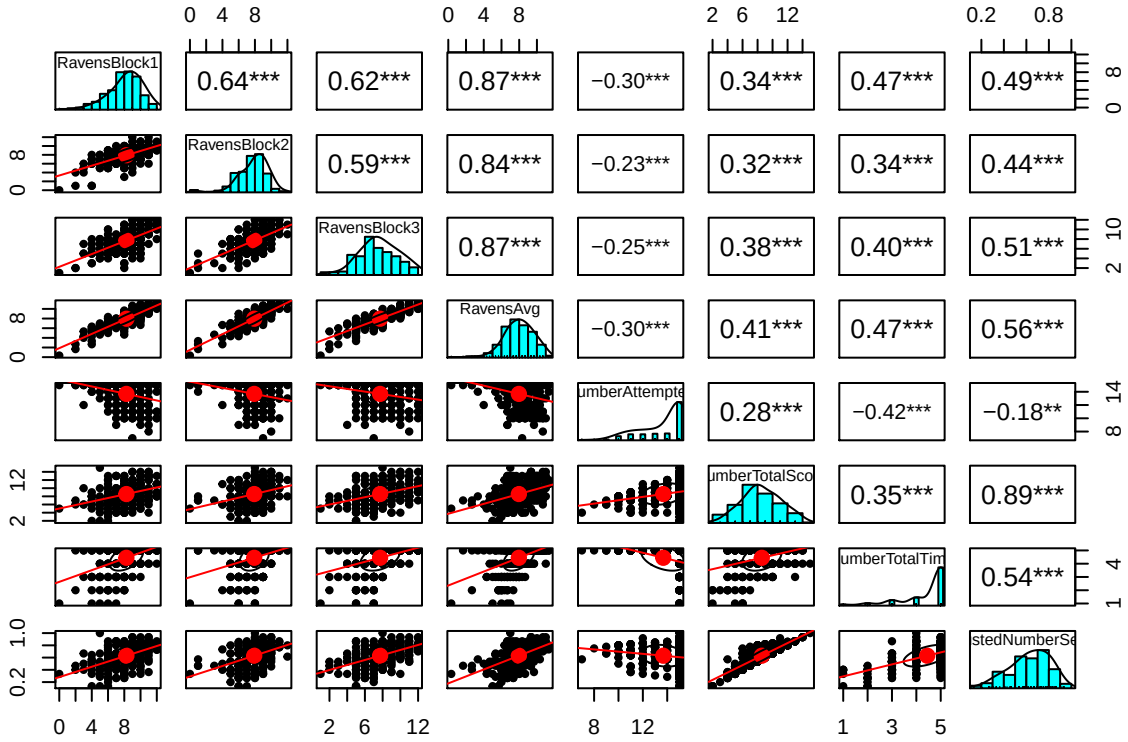



```
# And each task should negatively correlate with own processing task
negatives <- master[, .(TonePartial, toneaccError,
                        MeanOspanPartialScore, OspanAccError,
                        MeanSspanPartialScore, symmAccError )]
```

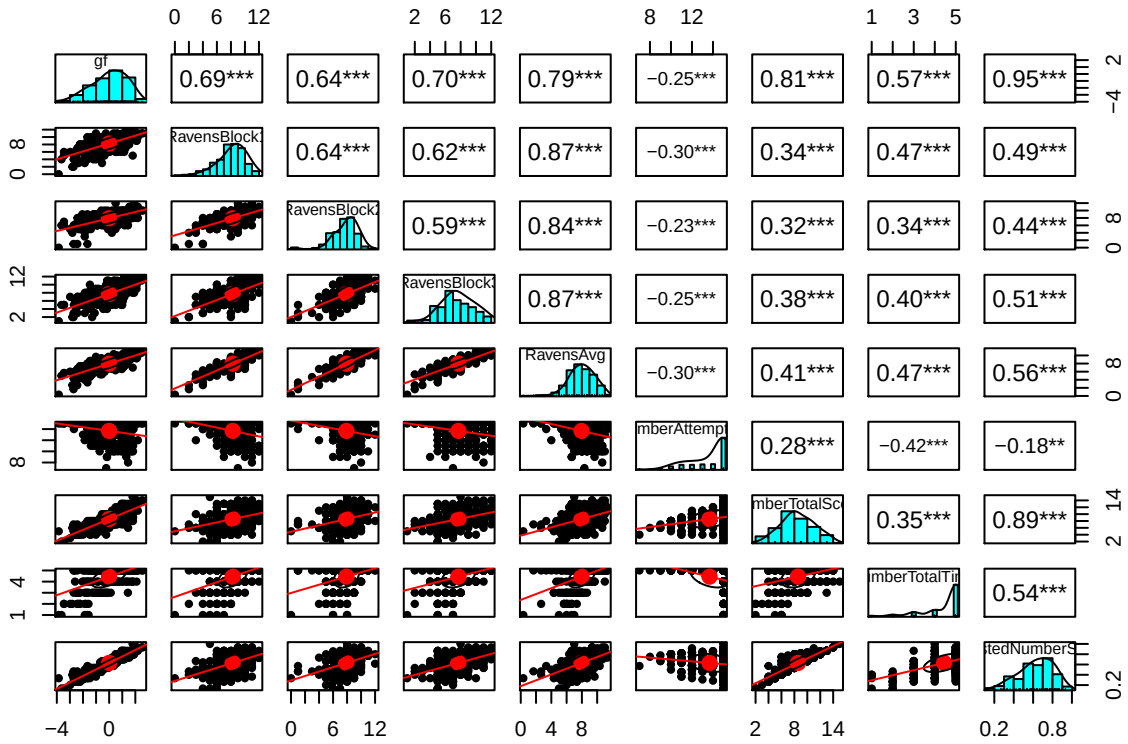
```
pairs.panels(negatives, lm = TRUE, stars = TRUE)
```



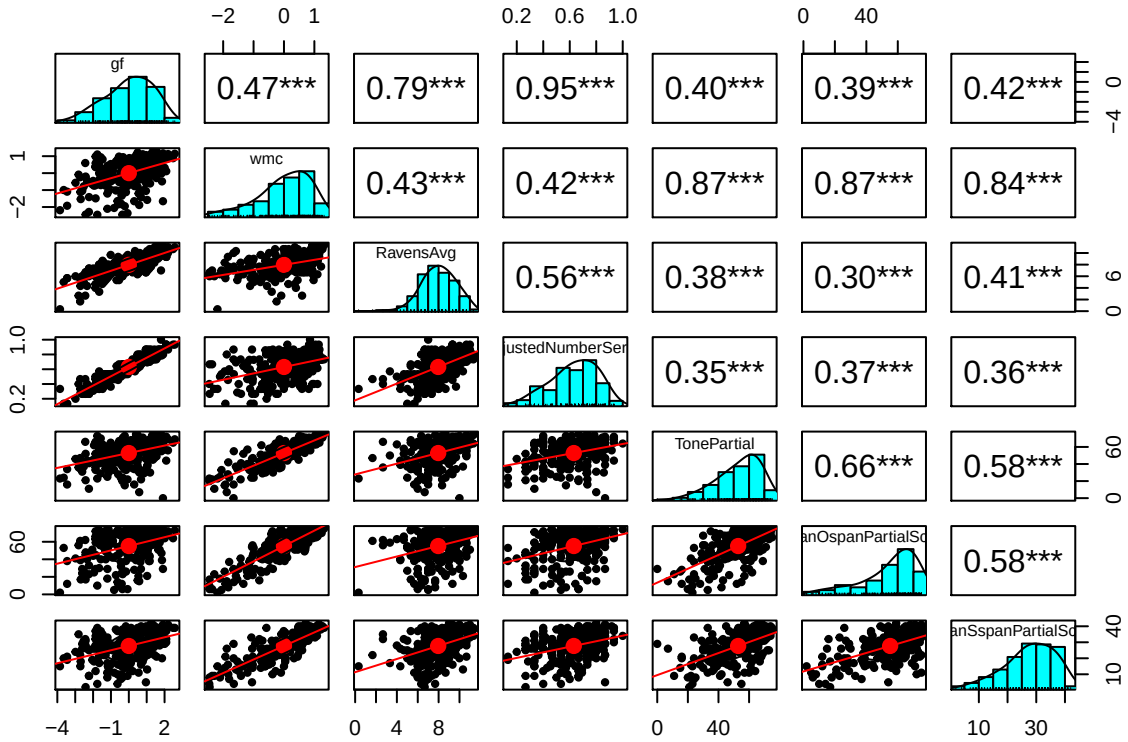

```
#-------------------------------------------------
# Above Correlations Suggest Creating new WMC composite

master[, wmc := ((scale(TonePartial)+scale(MeanOspanPartialScore)+scale(MeanSspanPartialScore))/3)]
#-------------------------------------------------
# Check that Gf are both measuring the same
# Create New Gf Variables

master[, AdjustedNumberSeries := NumberTotalScore/NumberAttempted]
master[, RavensAvg := RavensTotaljv/3]
gfscores <- master[, .(RavensBlock1, RavensBlock2, RavensBlock3,RavensAvg, NumberAttempted, NumberTotal

pairs.panels(gfscores, lm = TRUE, stars = TRUE)
```




```
#-----------------------------------------------------
# Above Correlations Suggest Creating new GF composite

master[, gf := (scale(AdjustedNumberSeries) + scale(RavensAvg)/2)]

gfscores <- master[, .(gf,RavensBlock1, RavensBlock2, RavensBlock3,RavensAvg, NumberAttempted, NumberTo

pairs.panels(gfscores, lm = TRUE, stars = TRUE)
```




```
#---------------------------------------------------
# Look at composites and their original scores

compositeComparer <- master[, .(gf, wmc, RavensAvg, AdjustedNumberSeries, TonePartial, MeanOspanPartialS

pairs.panels(compositeComparer, lm = TRUE, stars = TRUE)
```



## Descriptives and Reliability (Eventually)

```
#=============================================================================================================
# Create Descriptives and Reliability Table Here

# Coming to Repo near you!!!!
```

## Variables

Let me know if people want other variables for the analysis!

```
#=============================================================================================================
# Write out Dataset for Analysis

AnalysisData <- master[, .(gf, wmc, RavensAvg, AdjustedNumberSeries,subjectNo, ravenSex, goldage,
                           BeatPerception, MelodicMemory, GENERAL, ACTIVE,PERCEPTUAL,MUSICAL, SINGING, I
                           familyIncome, highestFather, highestMother,
                           RavensBlock1, RavensBlock2, RavensBlock3,
                           NumberAttempted, NumberTotalScore, NumberTotalTime,
                           toneaccError,ToneSpeedErr,TonePartial, TonePartialB1, TonePartialB2, TonePar
                           OspanAccError, OspanSpeedError,MeanOspanPartialScore, MeanOspanPartialScoreB
                           symmAccError, SymmSpeedError,MeanSspanPartialScore, MeanSspanPartialScoreBlo
```