MDD Subjects: BL vs SWD

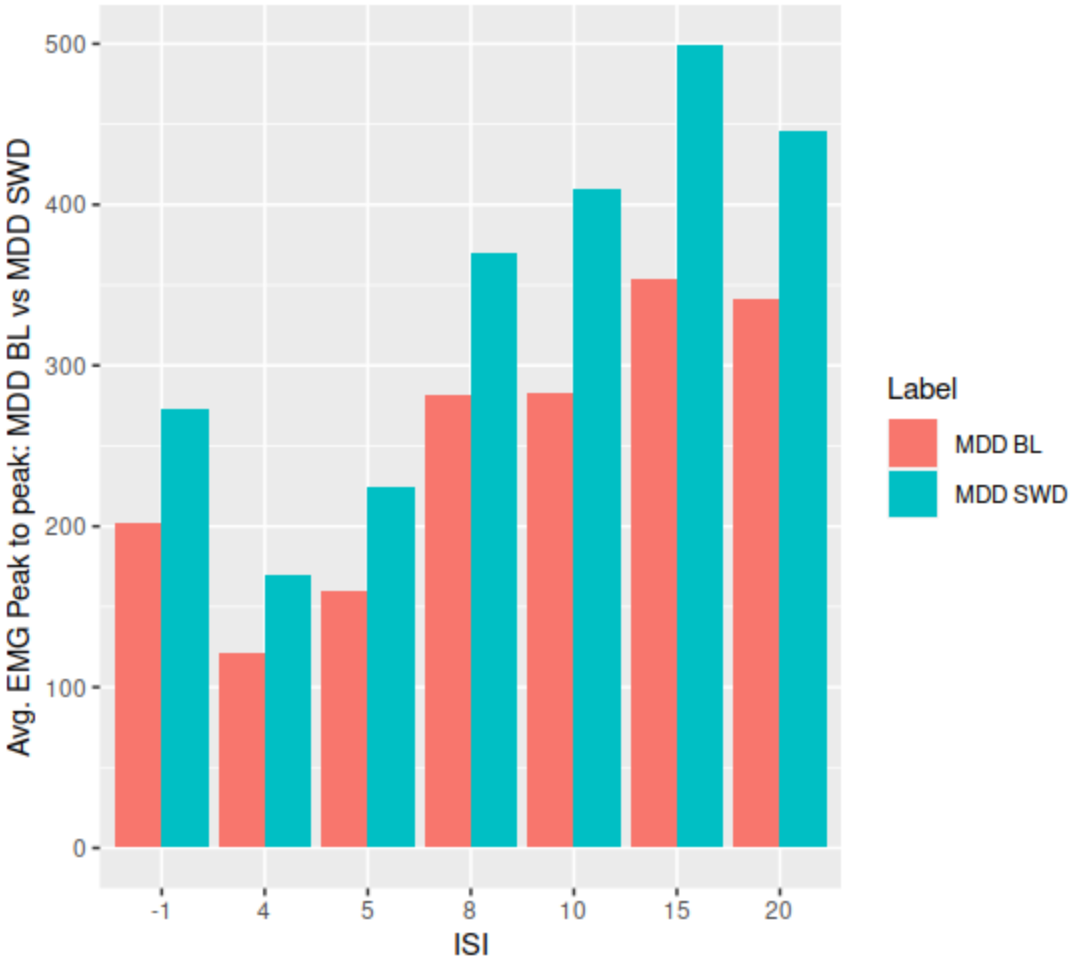
One-way ANOVA:

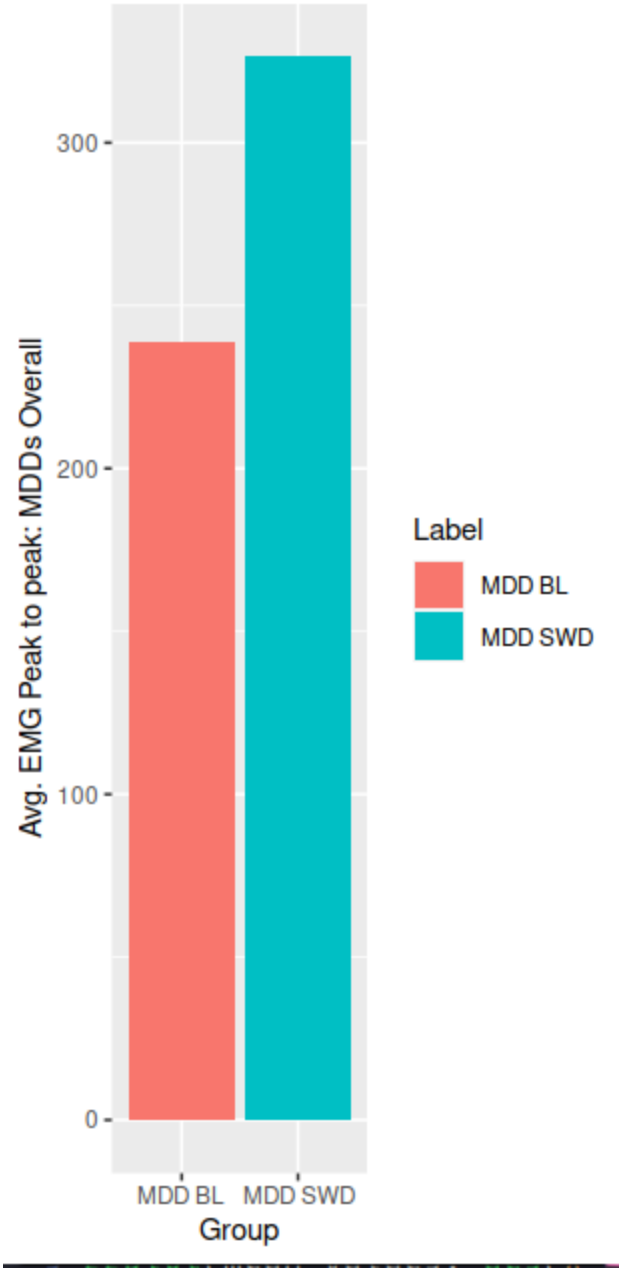
```
> res <- aov(EMGPeakToPeak ~ Label, df %>% filter(Group == 2))
> summary(res)
              Df    Sum Sq Mean Sq F value Pr(>F)
Label          1   8025321 8025321   97.38 <2e-16 ***
Residuals   5374 442865210   82409
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

# Robust tests

> X <- filter(df, Group == 2)
> a <- X %>% filter(Type == "SWD")
> b <- X %>% filter(Type == "BL")

# Wilcox test (median comparison): Differences between medians were found

> wilcox.test(a$EMGPeakToPeak, b$EMGPeakToPeak)

        Wilcoxon rank sum test with continuity correction

data:  a$EMGPeakToPeak and b$EMGPeakToPeak
W = 1557564, p-value = 1.251e-11
alternative hypothesis: true location shift is not equal to 0

# Permutation test (mean): Significant differences found

> summary(lmp(EMGPeakToPeak~Label,data=X))

Coefficients:
       Estimate Iter Pr(Prob)
Label1   -43.89 5000   <2e-16 ***
---
```

Two-way ANOVA:

```
> res <- aov(EMGPeakToPeak ~ Label * ISI, df %>% filter(Group == 2))
> summary(res)
              Df    Sum Sq  Mean Sq F value Pr(>F)
Label          1   6380841  6380841  84.113 <2e-16 ***
ISI            1  16764580 16764580 220.992 <2e-16 ***
```

```
Label:ISI      1    393228   393228   5.184 0.0229 *
Residuals   3308 250947288    75861
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1
```




300
200
100
0
Avg. EMG Peak to peak: MDDs Overall
MDD BL
MDD SWD
Group
Label
MDD BL
MDD SWD