## This is the our ANOVA model - we have a significant effect of Condition.

```
> model <- aov 4(Score ~ Condition + (1 + Condition | Participant), data = data)
> summary(model)
Univariate Type III Repeated-Measures ANOVA Assuming Sphericity
               SS num Df Error SS den Df F
                                                 Pr(>F)
(Intercept) 679632 1 936.49
                                    31 22497.36 < 2.2e-16 ***
Condition 17509 3 2179.48 93
                                         249.04 < 2.2e-16 ***
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
Mauchly Tests for Sphericity
         Test statistic p-value
Condition 0.90603 0.71042
Greenhouse-Geisser and Huynh-Feldt Corrections
for Departure from Sphericity
         GG eps Pr(>F[GG])
Condition 0.9401 < 2.2e-16 ***
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
           HF eps Pr(>F[HF])
Condition 1.043895 2.615157e-44
```

The effect size is measured by ges which stands for generalised effect size ( $\eta_G^2$ ) - this is the recommended effect size measure for repeated measures designs (Bakeman, 2005). We get this by using the anova () function on our model. Note the dfs in this output are always corrected as if there is a violation of sphericity - to be conservative (and to avoid Type 1 errors) we might be better off to always choose these corrected dfs.