

ANOVA_STUDY3

Margherita Calderan

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Load Data and Exclude id

```
go_nogo <- read_csv("DATA_OUT/go_nogo.csv", show_col_types = FALSE)
ideal_pred <- read_csv("DATA_OUT/ideal_pred_vkf.csv", show_col_types = FALSE)

## Here all subject excluded
dat_clean <- subset(go_nogo,
  # low ACC
  id != "GNG38" & id != "GNG59" & id != "GNG102" &
  # PSQI = 14
  id != "GNG82" &
  # not respect sleep schedule
  id != "GNG16" &
  id != "GNG21" & id != "GNG40" &
  id != "GNG46" & id != "GNG51" &
  id != "GNG52" & id != "GNG58" &
  id != "GNG65" & id != "GNG72" &
  id != "GNG75" & id != "GNG83" &
  id != "GNG92" & id != "GNG95" &
  id != "GNG96" & id != "GNG105" &
  # S = 2
  id != "GNG18" & id != "GNG29" &
  id != "GNG34" & id != "GNG50")

df_ideal <- dat_clean |>
  left_join(ideal_pred, by = "Trial")
```

PreProcessing

Select correct, faster than 100ms and no resp

```
df_go <- subset(df_ideal, rt > .1 ) |>
  dplyr::select(rt, id, P, Order, S, Trial, predictions, target) |>
  dplyr::mutate(id = as.factor(id),
    C = as.factor(Order),
    S = as.factor(S),
    PG = predictions/3,
    TN = scale(Trial)[,1]/3,
```

```
      rt = rt)|>  
na.omit() #exclude misses
```

Run ANOVA

```
# anova_res <- afex::aov_ez(  
#   data = df_go,  
#   dv = "rt",  
#   id = "id",  
#   factorize = FALSE,  
#   within = c("S", "PG", "TN"),  
#   between = c("C"),  
#   fun_aggregate = mean  
# )  
#Error:  
#! Empty cells in within-subjects design
```

ANOVA cannot be performed due to empty cells in the within-subjects design, meaning that subjects with at least one missing observation would need to be excluded. ‘