Template to submit your analysis for feedback

**Hypothesis/Question**: Specify what the question and hypothesis (if any) are. The more concrete the better.

* E.g. quarantined people with children at home will perform better at executive control than those stuck at home alone.
* Biological sex of the parent will matter (female parents might end up worse because they socially have more responsibilities)

**Variables involved**: Specify the variables involved in the analysis. E.g.

* Outcome: Score in the Test of IgnoringYourKids (IYK, trademarked). This involves 10 trials, each giving a performance score in discrete numbers, in a range 0 to 10.
* Predictors:
  + Binomial variable: children at home vs. home alone.
  + Binomial variable: Biological sex
* Varying effects
  + Repeated trials, so varying intercept by participant (ID)

**Statistical model**

**N.B:** assuming Bayesian analysis. In simulations you might just show the results and differences between conditions (you know the underlying model, so little point in statistically testing it)

* Equation of the model
  + IYK ~ 0 + Children:Sex + (1|ID)
* Likelihood function / family
  + Poisson
* Priors
  + Beta normal(0,1) # don’t know much. On a log scale it can go pretty high.
  + SD normal(0,.1) # we want to assume people are similar. 0.1 on a log scale can go pretty high.
* Prior predictive checks?
  + Performed / not performed (a pic if you want)
* Model comparison?
  + Are you going to compare more than one model? E.g. to see whether the interaction is adding anything? Specify which models.
* Simulated/pilot data?
  + Prepared/not prepared

**Results:** How would your report of the results look like? E.g.

* Quarantined people with children at home credibly display much better executive control than those without, as measured by IYK (main effect from the model without interaction: b = nn, se = nn, Cis = nn nn, ER = nn)
* This effect is largely driven by female participants (interaction: b = nn, se = nn, Cis = nn nn, ER = nn), with female participants showing a larger difference when with children (b = nn, se = nn, Cis = nn nn, ER = nn), than male participants do (b = nn, se = nn, Cis = nn nn, ER = nn).

Pointrange plot from conditional\_effects with the four conditions side by side. See here (not on this example, but same kind)

