Appendix: Pilot Experiment

2022-04-11

We add a new pilot dataset of 16 infants from Leiden University. Notes: Julien's data has age rounded to month – don't we want continuous age? There are 16 data files for Leiden participants, but inside the file for participant 16 the subject ID is '15': is this a duplicate, or should just be changed to 16? What are the procedures used by each lab? (Leiden = HPP, Julien = eyetracking?) Which random effects structures should we use for the 2 pilot labs (esp. tricky if they also vary procedure)?

Table 1: Summary of participants

age_months	n
8.00	7
9.00	2
10.00	2
11.00	6
12.00	15
13.00	2

Table 2: Regression coefficients.

	Estimate	Std. Error	df	t value	Pr(>|t|)
(Intercept)	7.97	0.57	18.91	14.03	0.00
fam_conditionABB	0.04	0.13	46.31	0.33	0.74
trial_typesame	0.28	0.40	341.67	0.70	0.48
age_months	0.05	0.05	28.38	1.10	0.28
trial	-0.03	0.01	85.48	-1.82	0.07
fam_conditionABB:trial_typesame	0.20	0.12	340.26	1.73	0.08
trial_typesame:age_months	-0.05	0.04	340.57	-1.29	0.20
trial_typesame:trial	0.02	0.02	354.23	1.03	0.30

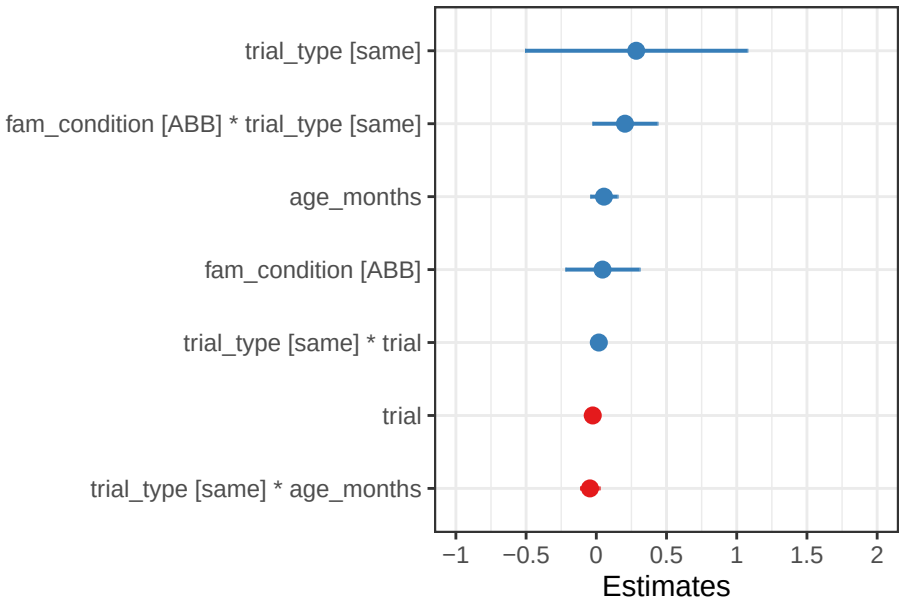


Figure 1: Regression coefficients with 95% confidence intervals.

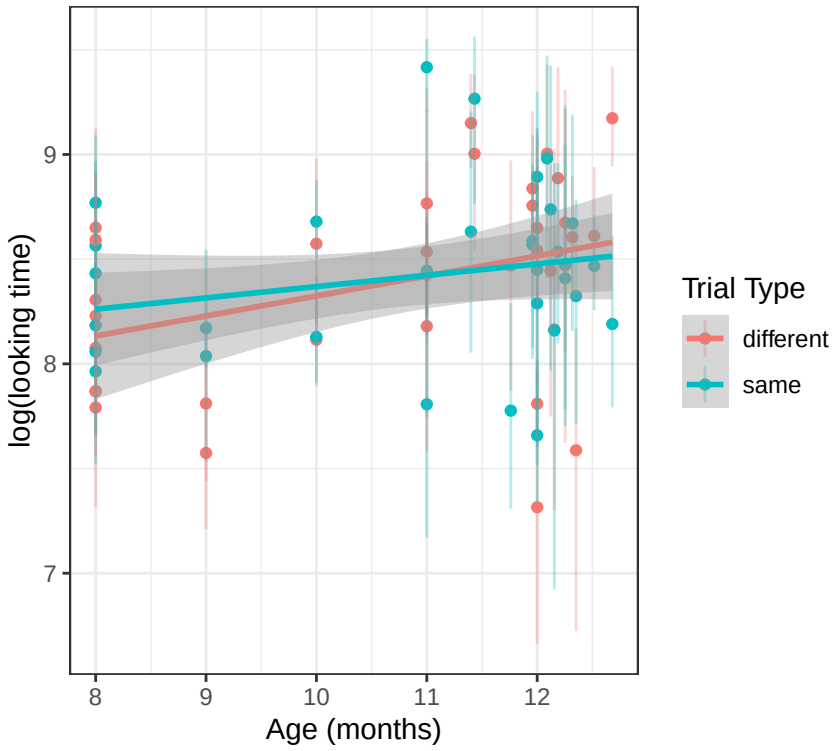
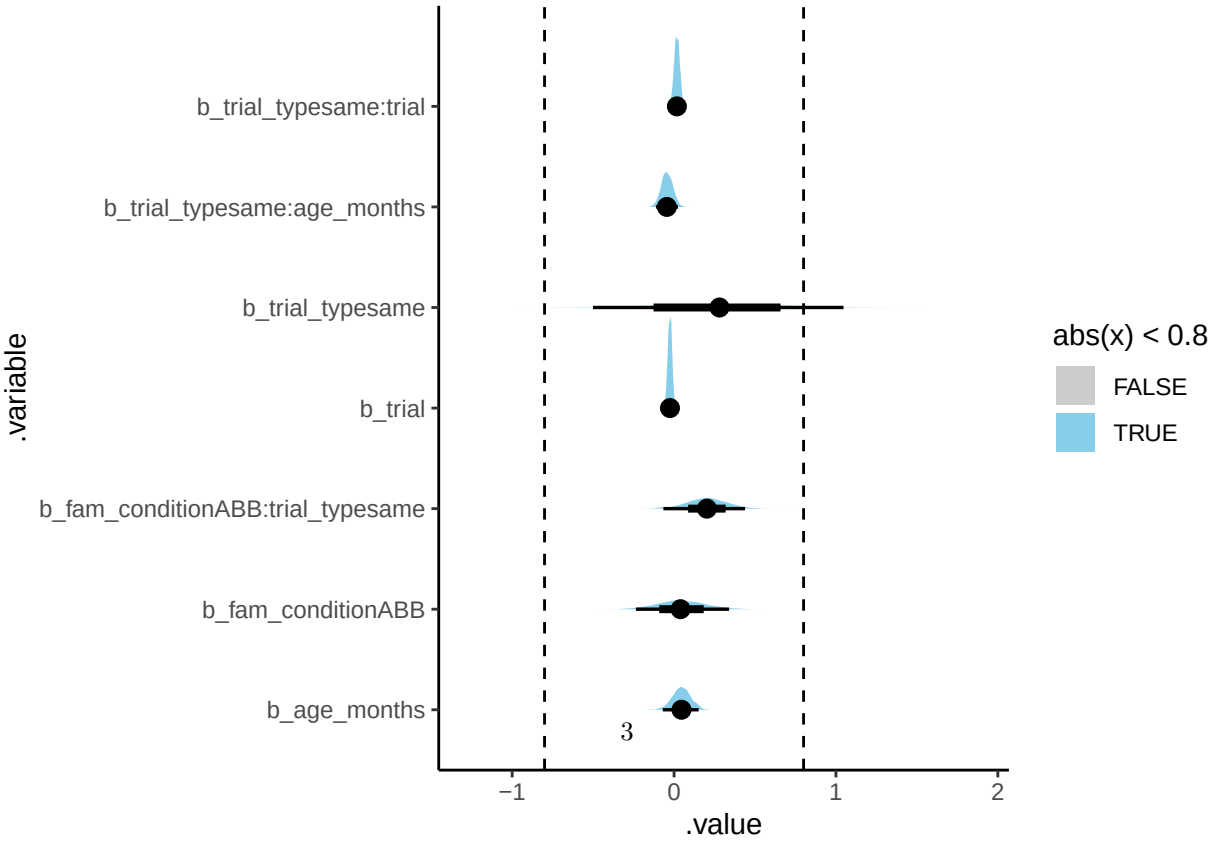


Figure 2: Log(looking time) by trial type and age, and bootstrapped 95% confidence intervals.

Participants

Analysis

Bayesian Regression



Generate posterior predictive values.