

Bodily anticipations during early triadic interactions: A case study

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1 Background

- Babies' bodily anticipations (BA) of others' actions are cases of enactive intentional comprehension.
- Many authors agree that early triadic interactions (adult-object-baby) are constitutive of cognition.
- There are no studies that describe the BAs performed by infants to the instrumental actions of others.

2 Method

- We carried out a descriptive, single case, multivariate and longitudinal study.
- We filmed a mother and her child (at 6, 8, and 10 months) during lunchtime, at home (Argentina).
- We described variations in the frequency and duration of BAs in early triadic interactions (adult-object-baby).



Fig. 1 The setup

We filmed early triadic interactions at home. Mother was asked to feed her infant as she normally do.

3 Data coding and analysis

- Using BORIS we identified all the BAs. After that, we categorized them into three levels (1, 2, and 3; the higher the level, the better the adjustment to others' instrumental behavior).
- We analyzed frequencies and proportions and fitted a generalized linear model with gamma family and log link function to assess the effects of age and the BA level on the duration of BAs.

4 Results

- At 6 months, level-2 BAs are the most frequent and level-1 BAs are the longest ones.
- At 8 months, level-1 and level-2 BAs become less frequent and occupy a lower proportion of session time. Contrarily, level-3 BAs grow in number, as does the proportion of time they occupy.
- At 10 months, level-3 BAs are the most frequent and longest ones and occupy the largest proportion of time.

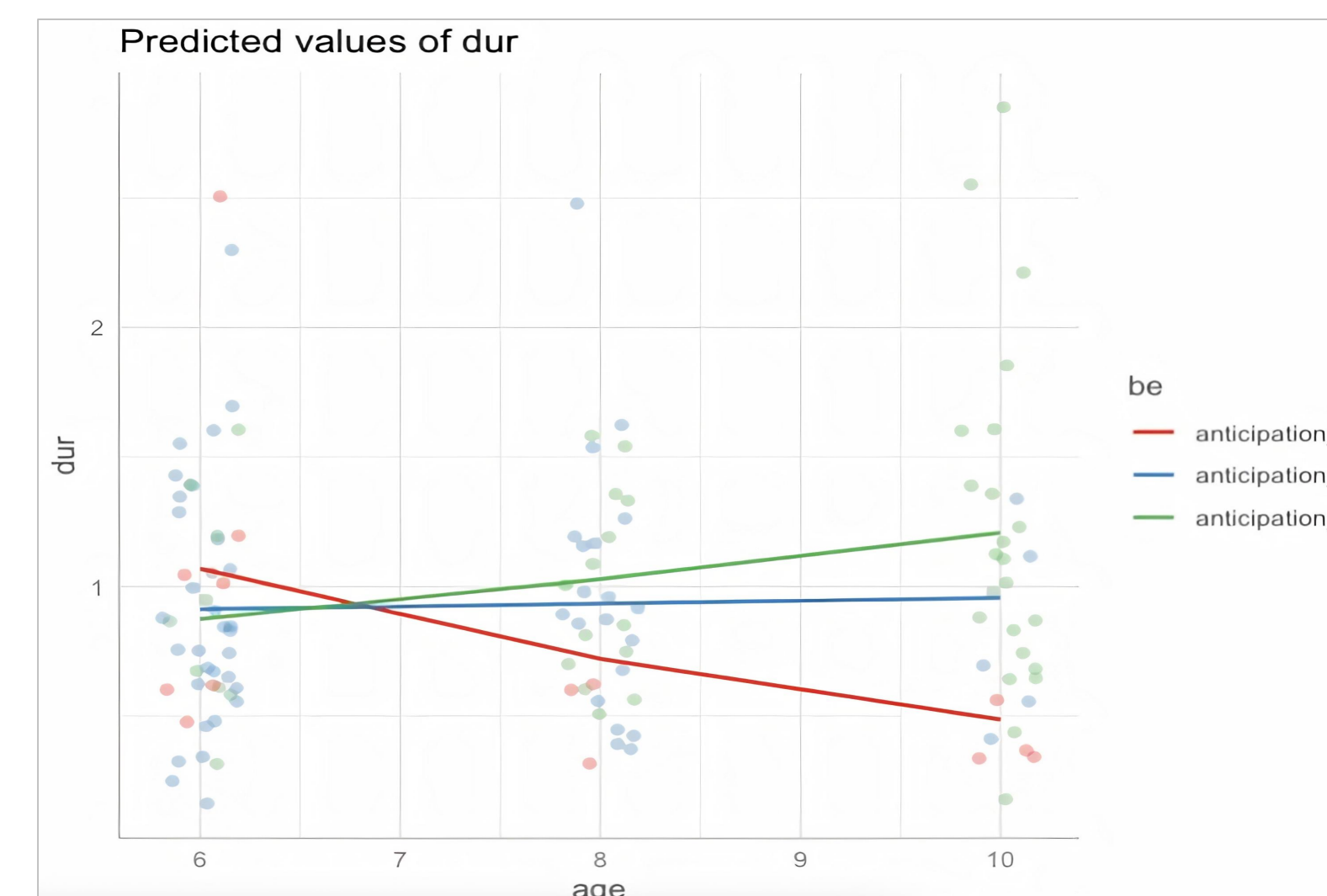


Fig. 3. Generalized linear model

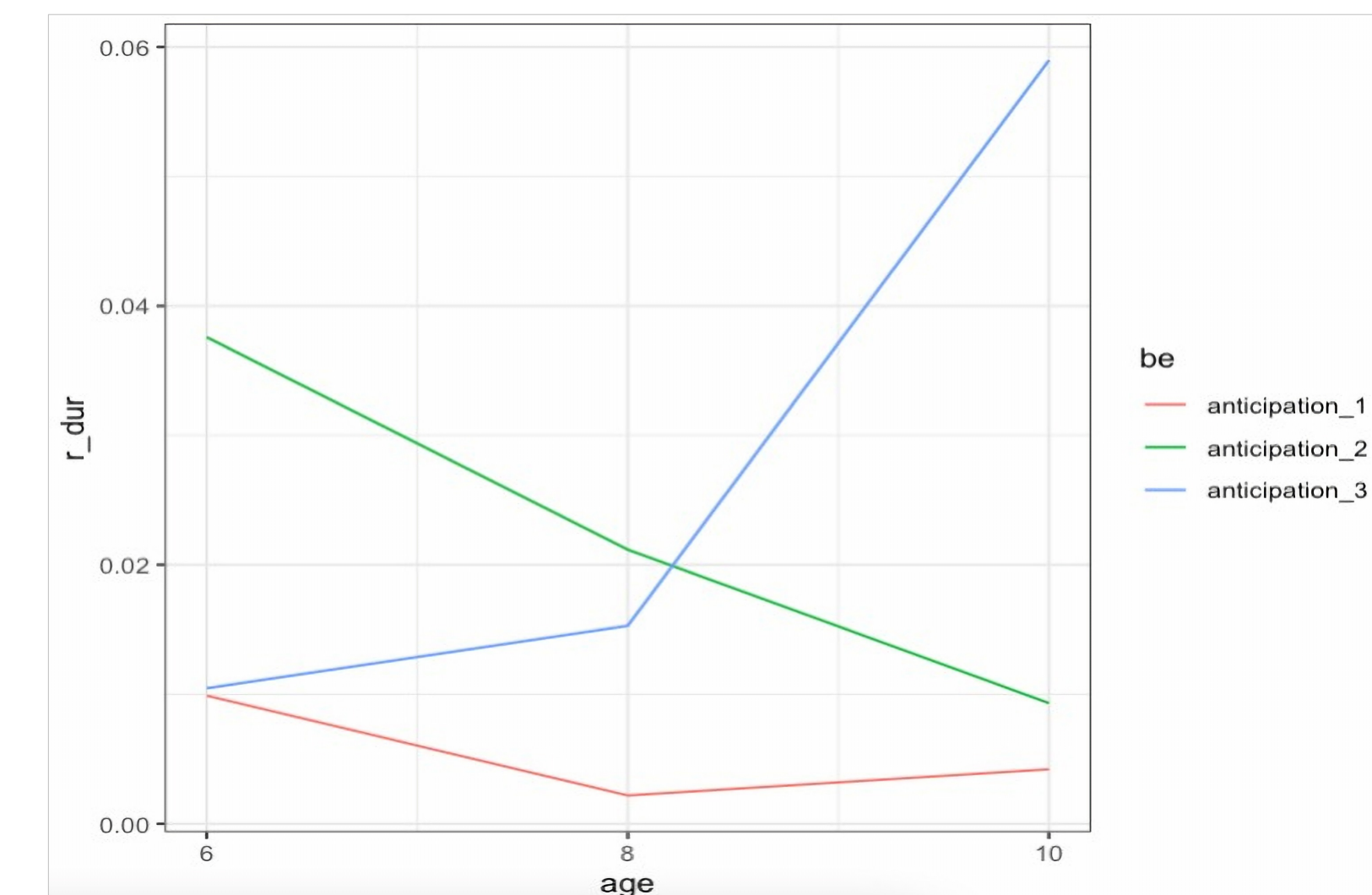


Fig. 2. Duration of BAs at 6, 8 and 10 months

- The GLM predicts that the duration of level-1 BAs diminishes with age, while that of other BAs increases mildly (level-2 BAs) and distinctly (level-3 BAs) (Figure 3).

5 Discussion

- Results suggest that BAs become more specialized between 6 and 10 months, allowing children to better coordinate their behavior to others' instrumental actions.
- Early triadic interactions seems to contribute with the development of intentional comprehension.