



Turn-taking and its timing in infancy: A longitudinal study at 3-, 4- and 5- months

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Background

- To become competent communicators infants need to acquire the ability to minimize gaps and overlaps during communicative exchanges.
- Interaction Engine hypothesis: Temporal properties of turn-taking should be realized early in development.¹
- Few studies are available on timing of turn-taking and findings have been mixed.^{2,3}
- There is some evidence of a transition around 4 months from mainly co-vocalizing towards an alternating structure.⁴

Aim

- Assessing infants' abilities to time their turns longitudinally at 3-, 4-, & 5- months.

Method

Ten-minute free-play interactions (N=8) were transcribed at 3-, 4-, and 5- months for all vocalizations made by the infants and their English speaking mothers.



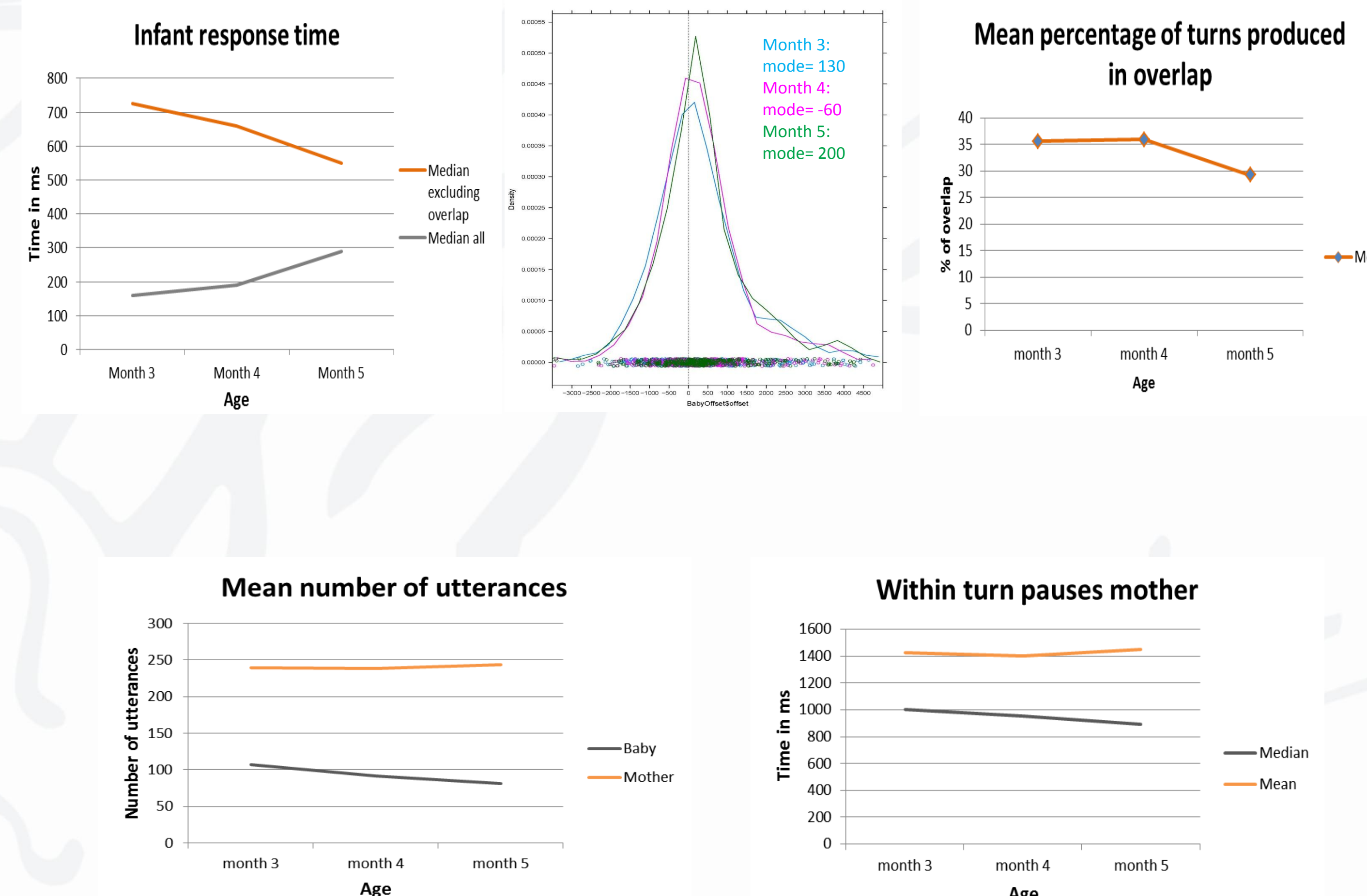
Measures

Infant response times were calculated from the end of the mother's utterance until the start of the infant's vocalization.

Maternal response times were calculated from the end of the infant's vocalization until the start of the mother's utterance.

Negative response times indicate that the vocalization starts in overlap with the vocalization of the interaction partner.

Results



Conclusion

- Both the decrease in response times and the significant decrease in the percentage of vocalizations produced in overlap from 3- to 5-months indicate that infants are gradually developing into more competent turn-takers from 3- to 5-months.
- This supports the prediction made by the Interaction Engine.
- The decrease in overlapping turns is not caused by a decrease in the number of utterances produced by the mother. Rather, the number of utterances produced by the infants decreased.
- The decrease in overlap is not caused by the mothers leaving longer gaps between their utterances.
- However, how much of the change in infant response times and overlapping vocalizations is due to maternal scaffolding strategies and how much is due to the infants' changing their behavior needs further exploration.

References

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