

Overview

- Early language experiences are foundational to school readiness and subsequent academic success.
- Studies of structured tasks in labs provide limited information about natural early language experiences at home.
- Time diaries coupled with audio recordings provide an unique window into the natural language environments of infants.

Research Questions

- Using time diary data (to be validated with audio recordings),
- Who is present in infants' early language home environment?
 - What is the prevalence of playing, reading and watching TV?

Sample

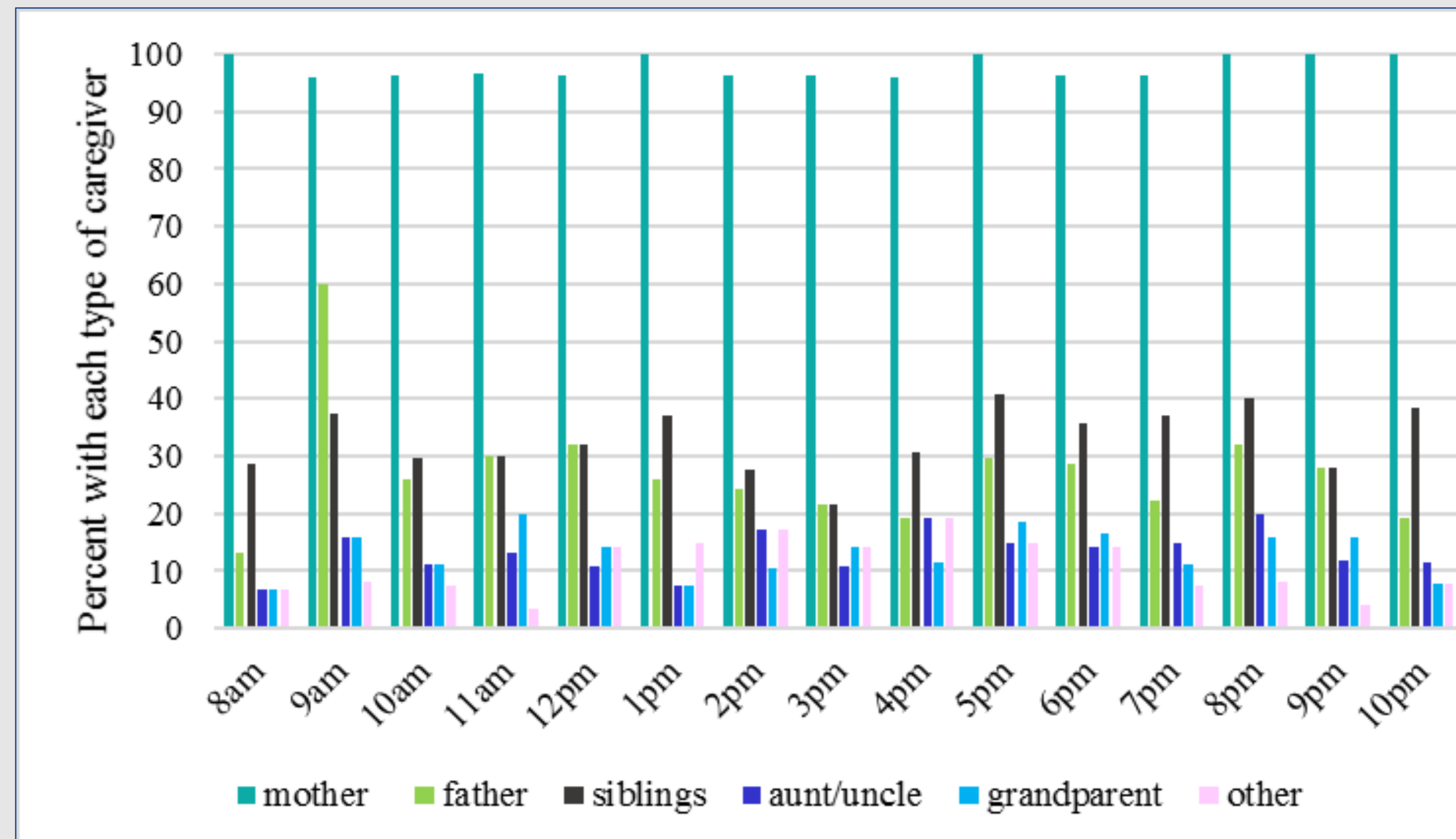
- Data were collected from 30 mother-infant pairs served by a population based NYC home-visiting program.
- On average, mothers were 29.8 years old (SD=7.15)
 - 90% primarily spoke English
 - 37% were first-time mothers
 - 43% reported breastfeeding their infant
 - 76% reported receiving WIC
 - Families were residentially stable; having lived in the same address, on average, for 3.7 years (SD=1.12)

Methods

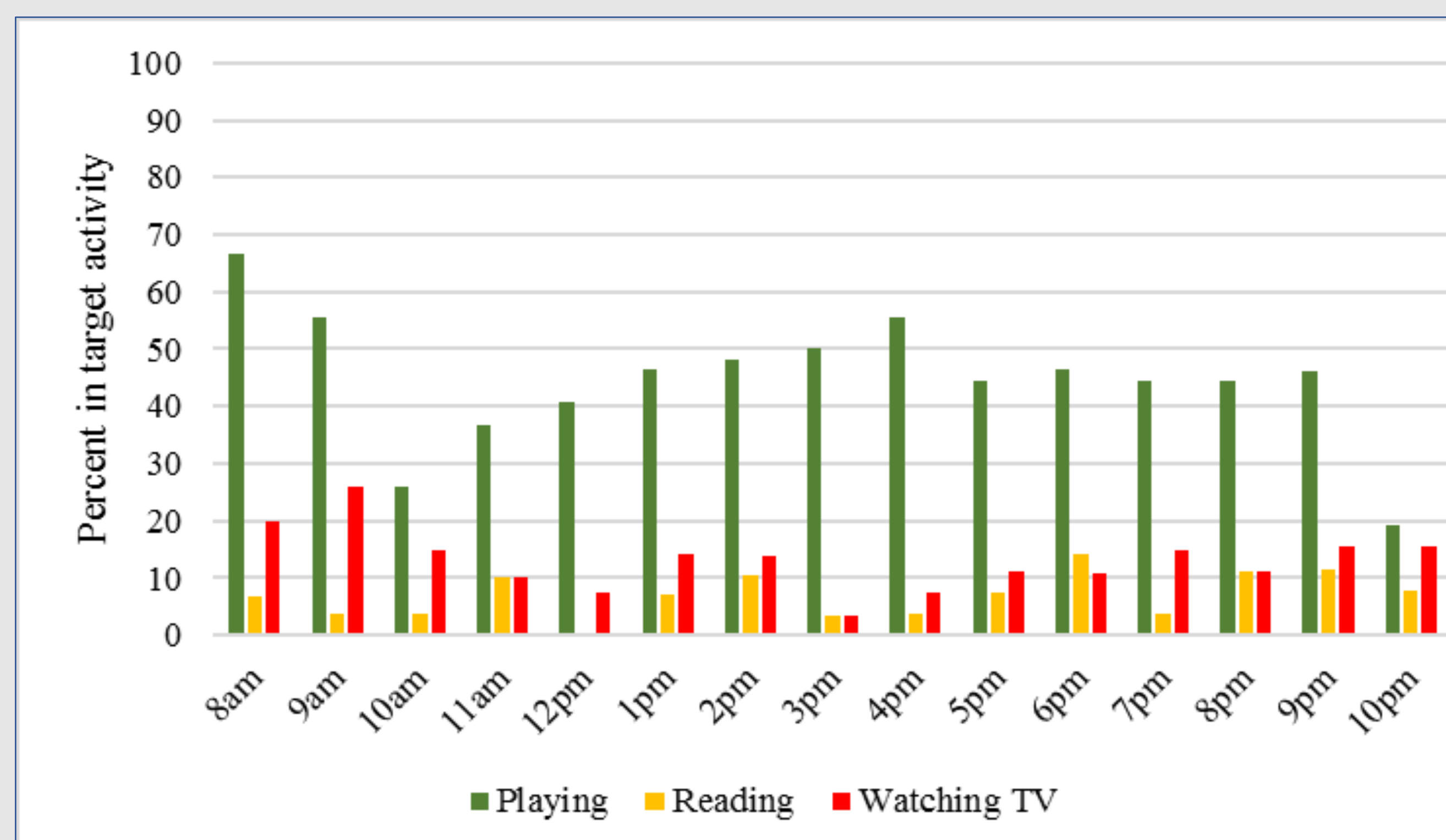
- Families participating in a larger study were re-contacted when their child was 3-to 5 months old.
- Consenting families agreed to audio recordings of their infant for a minimum of 10 hours.
- Mothers completed time diaries on the day of the recording and returned them the next day.
- In the intervention group, a random half of the mothers received supplemental content on early language and literacy via text messages, an in-person affirmation coupled with a video demonstrating responsive parent-child interactions, and a book gift package.

Results

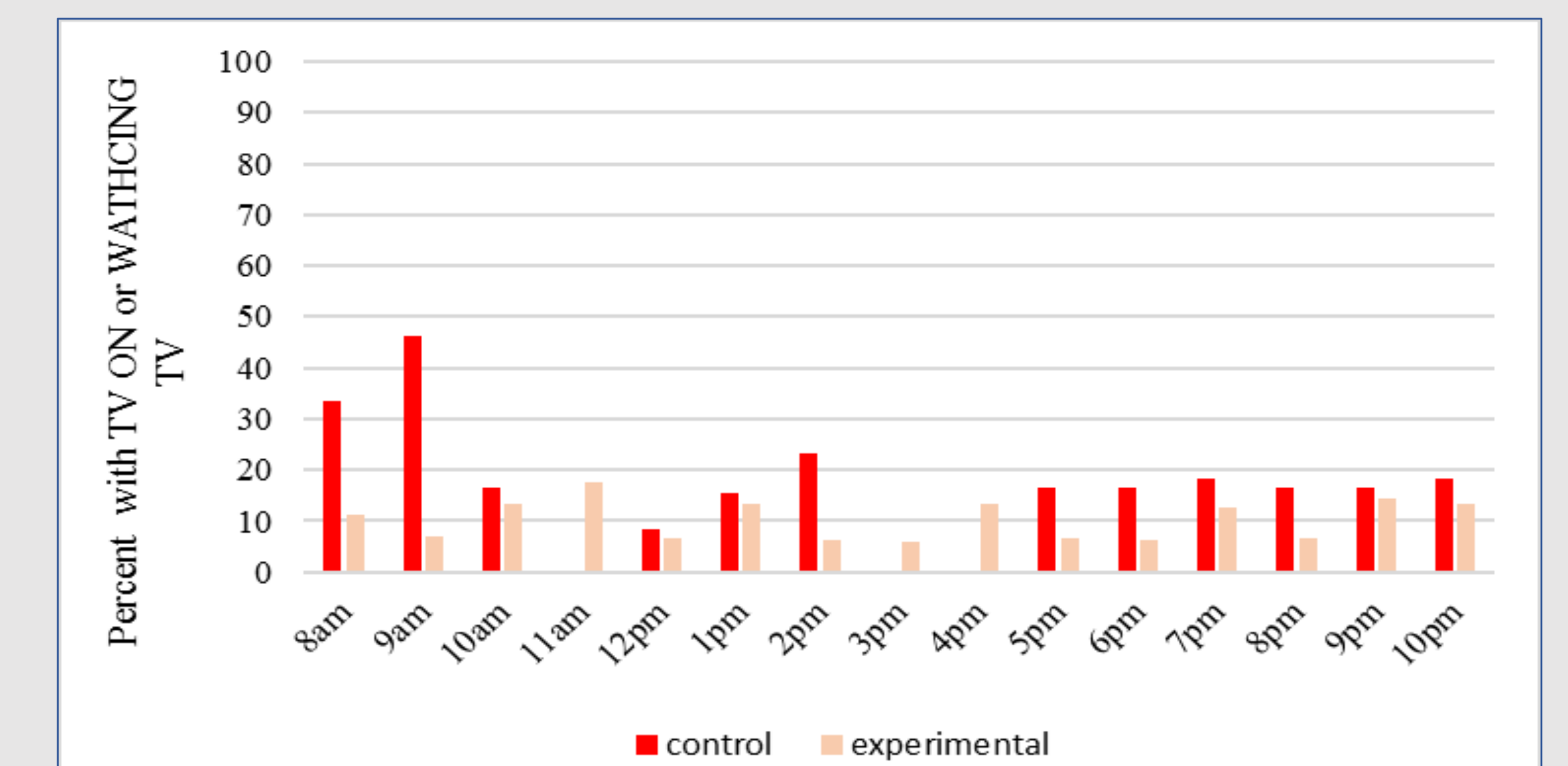
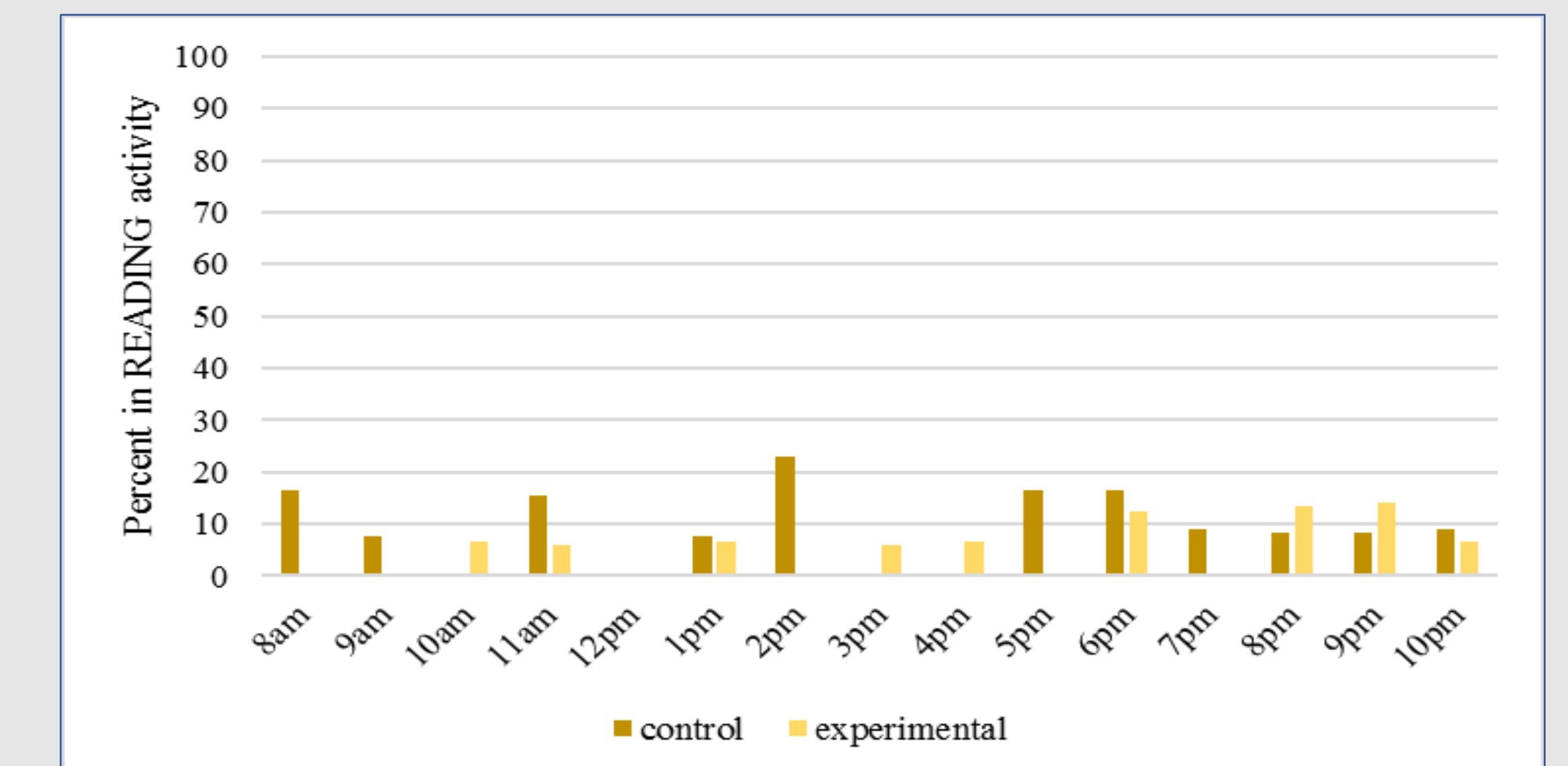
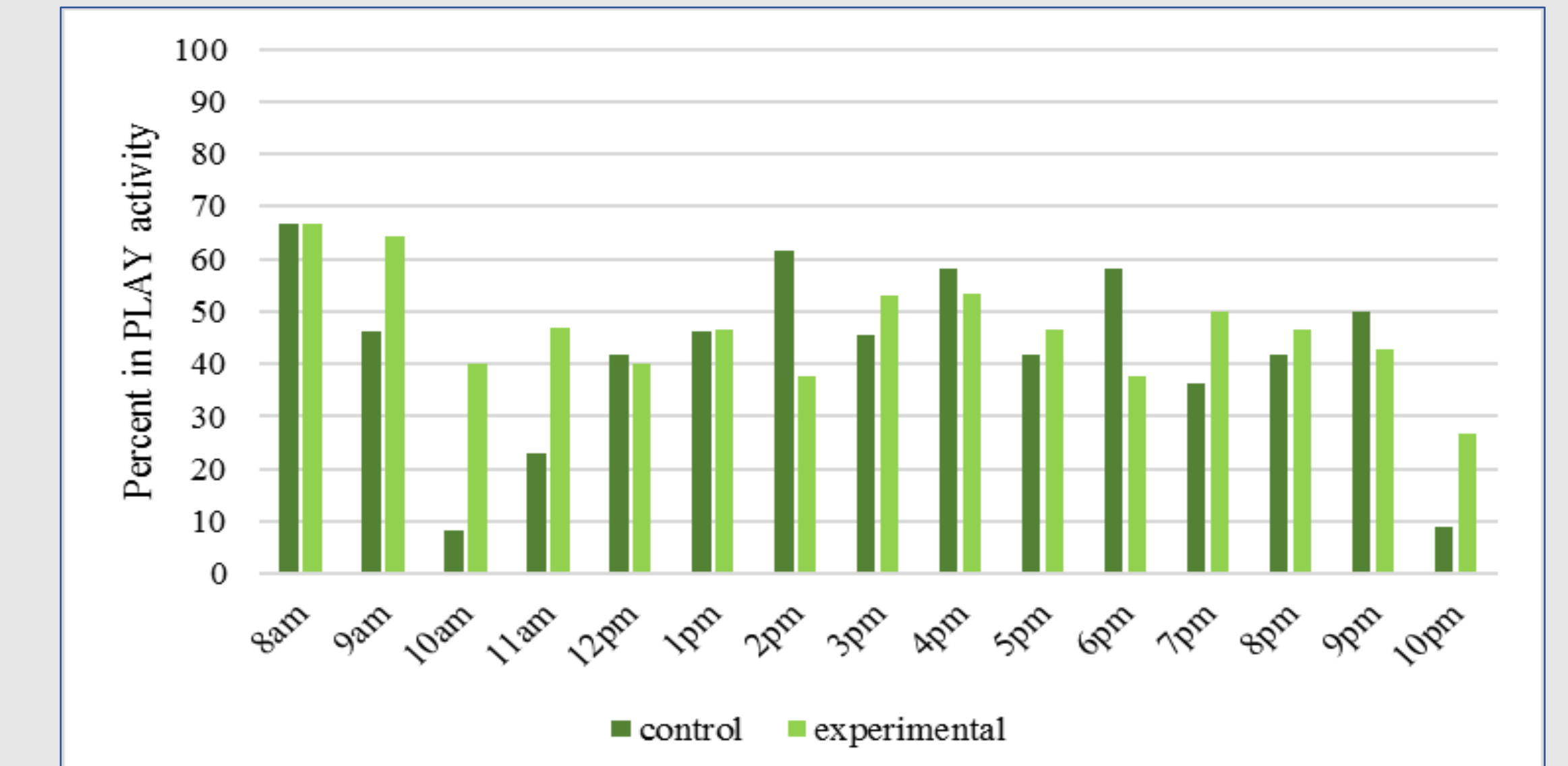
Individuals Present in Infant's Early Home Environment



Prevalence of Target Activities in Infants Home Environment



Target Activities by Intervention Status



Conclusions

- Mothers and siblings have the highest presence at home over the course of a day in low income households with infants
- Play is the most common activity distributed relatively evenly over the course of the day. TV watching is more prevalent than reading, especially between 8 and 10am.
- Infant households that received early learning enhancements were slightly more likely to play and less likely to watch TV over the course of the day.

Future plans: Maternal-infant language interactions with audio data is being transcribed to code word tokens and word types to test intervention differences in the amount and quality of child-directed speech.