

## INTERACTION AFFECTS CHILDREN'S PERSPECTIVE-TAKING IN MULTIPLE-PARTY CONVERSATION

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Previous studies showed that 5- to 6-year-old children can take the other's perspective during a conversation (Nadig & Sedivy, 2002). The present study moves forward to explore whether younger children switch among the conversational partners' perspectives, or integrate all the partners' perspectives when there is more than one partner.

**Methods:** Thirty 3-year-old Mandarin-speaking children participated in the study. They sat in front of a frame with one blocked grid. The display either contained four different objects (the non-competitor condition) or two different and one pair of the same objects (the competitor condition). Experimenter 1 (E1) either sat on the same side with the participants, sharing all the objects with them (the sharing condition) or sat on the opposite side, sharing only three objects (the non-sharing condition). Experimenter 2 (E2) always sat on the opposite side (Fig 1). Either E1 or E2 instructed participants to “point to the dog” in each trial. The target object (e.g. “the dog”) was always presented in the transparent grids, with or without the competitor in the blocked one.

**Results:** Supposedly, children should be less likely to choose the competitor object when E1 instructed in the non-sharing condition but should seldomly choose the competitor when E2 instructed in both sharing and non-sharing conditions, because E2 always sat on the opposite side, as E1 in the non-sharing conditions.

As predicted, for E1 items, behavior analysis showed that participants chose fewer competitor items in the non-sharing condition, compared to the sharing condition,  $p < .05$ . However, for E2 items, participants showed a similar pattern as in E1 items,  $0 < .05$  (Fig. 3).

Participants' fixation on the competitor object was also calculated across the interval of the critical noun (e.g., “dog”). In E1 trials, addressees were less likely to look at the competitor object in the blocked grid in the non-sharing condition,  $p < 0.1$ . However, their eye fixations on the E2 trials displayed a similar pattern to E1 trials: children are more looked at the competitor object in the grey grid when E1 sat next to them, regardless of the instruction given by E2, who always sat on the opposite side,  $p < 0.1$  (Fig. 4).

**Conclusion:** Firstly, the difference between the sharing and non-sharing conditions in E1 trials showed that 3-year-old children can take others' visual perspectives. When E1 sat on the other side, the children would ignore the mapped objects in the blocked grid. However, the result in E2 trials showed that children integrate both speakers' perspectives and resolve the definite reference according to the integrated perspective. In sum, we propose a conversation-specific perspective-taking that children treat all their conversational partners' perspectives holistically.



Fig. 1. The sample display in the sharing (left) and non-sharing (right) conditions.

### Reference

Nadig, A. S., & Sedivy, J. C. (2002). *Psychological Science*, 13(4), 329-336.