

Small Children, Big Changes: Exploring Teachers' Contingency in Circle-Time Interactions with 0-3-Year-Olds

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ABSTRACT

Understanding early linguistic development requires examining adults' responses to children's communicative initiatives, which are most effective when temporally and semantically contingent (Karmazyn-Raz & Smith, 2022; MacGillion et al., 2013). While dyadic interactions are well-studied, less is known about how teachers adapt their strategies during group interactions in early childhood education (ECE) classrooms (Degotardi, 2021).

This study examines how teachers adjust to group dynamics through the contingency of their speech to children's interventions during circle-time activities. Naturalistic observations of circle-time activities were conducted in 30 classrooms across eight nursery schools located in low to middle-income urban areas of Madrid and Toledo (Spain). The classrooms varied in age groups (0-1, 1-2, 2-3 years), group sizes (3 to 16 children), teacher-to-child ratios, and socio-cultural diversity. Using an R script, we automatically measured the temporal contingency of teachers' responses to each child's verbal interventions within a two-second window, focusing on: (1) the proportion of temporally contingent teacher responses, (2) the proportion of children's interventions without responses within the time window, and (3) the proportion of non-responses where the teacher addressed the group or another child instead.

Findings show that children's initiatives often lack teacher follow-up in crowded classrooms. Additionally, the probability of temporally contingent responses decreased as group size increased and children's linguistic abilities improved, indicating that contingency depends not only on abilities but also on contextual factors. Further research is needed to explore whether non-responses directed to the group or another child can serve as indirect forms of semantically contingent input. These results emphasize the impact of classroom size on participation and highlight the importance of studying group dynamics to develop inclusive and effective ECE practices.

Keywords: contingency; group dynamics; communicative development; early childhood education.