Tracing the developmental trajectory of children's relational learning

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Abstract

There are some puzzling findings concerning the early development of relational cognition. There is evidence that infants can carry out analogical generalization and form abstract relations such as same (X,X) (Anderson et al., 2018; Ferry et al., 2015). Yet, 3.5-year-olds have difficulty with these relations (Christie & Gentner, 2014; Hochmann et al., 2017; Walker & Gopnik, 2016). Further, Walker et al. (2016) find a decline from 1.5 years to 3.5 years on another same-different task (see also Carstensen et al., 2019) while prior studies have found gains in relational reasoning during this period (e.g., Gentner & Rattermann, 1991). To reconcile these findings, we are re-examining this developmental trajectory with a new task. Children must point one direction for same pairs and another for different pairs. The results revealed that 4-year-olds learned and generalized same-different relations after four exemplars and are discussed in the context of a competence-performance distinction.

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