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Synchronized development of possibility reasoning and theory-of-mind: Evidence from a cross-cultural study

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Abstract

Mental file theory provides a valuable framework for explaining the synchronized development of theory-of-mind (ToM) and other tasks that require taking perspectives into account. To investigate whether possibility reasoning also taps into this process, we examined its correlation with ToM in German (N=58) and Chinese preschoolers (N=47), and in Austria (ongoing replication study). Our results show a positive correlation between false belief reasoning and possibility reasoning in both samples. After controlling for age, the correlation survived in the Chinese sample but not the German sample. This suggests that both kinds of reasoning may depend on common processes, which emerge around age 4. Findings from a replication study will be presented to clarify the inconclusive results. We also investigated relational reasoning which showed no correlation with ToM and exhibited distinct developmental trajectories within cultures, indicating that it is shaped by culture rather than a general cognitive milestone.