

# Research Explores How Children Reason, Think About Others

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Two new studies published in [Psychological Science](#), a journal of the [Association for Psychological Science](#), explore the development of reasoning and perspective-taking in children.

## [How to Pass the False-Belief Task Before Your Fourth Birthday](#)

As social creatures, humans must constantly monitor each other's intentions, beliefs, desires, and other mental states. A particularly important social skill is the ability to take another person's perspective and understand what the person knows, even when that knowledge may ultimately be false. Past research has shown that before the age of 4, children fail to pass standard tasks designed to measure false belief; however, new research has shown that very young children can pass nonverbal versions of false-belief tasks. Paula Rubio-Fernández of University College London and Bart Geurts of the University of Nijmegen tested 3-year-old children using a standard false-belief task called the Smarties task and using an altered, more streamlined version of the false-belief task called the Duplo task. The Duplo task was designed to minimize disruptions in children's perspective-taking. The researchers found that while only 22.7% of children passed the Smarties task, 80% of children passed the Duplo task. This suggests that 3-year-old children are able to pass a verbal false-belief task if they are able to keep track of the protagonist's perspective.

## [Early Executive Function Predicts Reasoning Development](#)

Although analogical reasoning is a core cognitive skill that distinguishes humans from other animals, its origins are still not well understood. Psychological scientists Lindsey Richland of the University of Chicago and Margaret Burchinal of the University of North Carolina, Chapel Hill analyzed data from children who were part of the Study of Early Child Care and Youth Development. They assessed children for vocabulary knowledge, sustained attention, short-term memory skills, executive functioning skills, and analytical reasoning skills and found that children's early vocabulary knowledge and executive-functioning predicted their analytical reasoning skills at age 15. These results indicate that composite executive-function skills make specialized contributions to the development of children's analytical reasoning. They also support the idea that language and knowledge are necessary for the development of analytical-reasoning skills.