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How do young children interpret conditionals?

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Abstract

Conditionals have multiple interpretations: the statement "If it rains, Abbie will buy an umbrella" is true when it rains and Abbie buys an umbrella (conjunction), when it doesn't rain and Abbie doesn't buy an umbrella (biconditional), and when it doesn't rain and Abbie buys an umbrella (conditional). Prior research shows that children understand all three interpretations in adolescence, but the reasons for this delay remain unclear. For some researchers, children struggle to represent multiple possibilities due to limited resources. For others, task-related factors underlie children's difficulties. In a truth-value judgement task, 3-10-year-olds matched a conditional statement with one of two pictures: 1 depicting a false interpretation of the conditional vs. one of the 3 true interpretations. Results showed that children understood conjunction since age 3 but comprehended all three conditional interpretations at age 9, earlier than previously thought. Findings point to a task-related explanation of children's difficulties.