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Authors

Chuey, Aaron
Gweon, Hyowon

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Preschool-aged children can use communicators' influence on others to infer what they know

Aaron Chuey

Stanford University, Stanford, California, United States

Hyowon Gweon

Stanford University, Stanford, California, United States

Abstract

How do we know what others know? Prior work has focused on our early-emerging ability to infer the knowledge of single agents. Yet we often infer others' knowledge by observing interactions between agents. In particular, the ability to reason about what communicators know can help children identify knowledgeable teachers. The present study investigates whether preschool-aged children infer what communicators know from how their communication influences listeners. Children observed two scenarios where a listener failed to activate a toy before succeeding. In the Effective-Communicator scenario, a speaker spoke nonsense language to a listener after they failed but before they succeeded. In the Ineffective-Communicator scenario, a speaker spoke to a listener before they initially failed. By around age 5, children preferred the one in the Effective-Communicator scenario when asked which speaker knows how the toy works. These results suggest young children can infer communicators' knowledge solely from the presence of communication and its influence on others.