Children select informative observations to test hypotheses about agents

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Abstract

Children interpret the behaviors of agents in terms of internal features like goals, preferences or traits, which often have to be inferred indirectly from observed actions. To draw reliable inferences, rational learners should prefer observations that are relatively more informative with regards to these hidden variables. We tested whether 3- to 7-year-old children (n=83) selectively seek out informative observations about novel agents. To help them answer questions about alien characters' goals and traits, children could choose to watch one of two video clips on the basis of static images depicting the onset of events. One of these was more likely to yield relevant disambiguating information than the other. We found that children chose to watch the more informative video above chance from 4.3 years of age, suggesting that preschoolers can predict the evidential value of potential future observations to guide learning in the social domain.

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