

The price of knowledge: Children infer epistemic states and desires from explorations cost

Rosie Aboody

Yale University, New Haven, Connecticut, United States

Caiqin Zhou

Wellesley College, Wellesley, Massachusetts, United States

Julian Jara-Ettinger

Yale University, New Haven, Connecticut, United States

Abstract

When deciding whether to explore, people must consider both their need for information, and the cost of obtaining it. Thus, to judge why someone explores (or decides not to), we must consider not only their actions, but also the cost of information. Do children attend to the cost of agents exploratory choices when inferring what others know or desire to know? In Experiment 1, four- and five-year-olds judged that an agent who rejected an opportunity to gain low-cost information must have already known it. In Experiment 2, four- and five-year-olds judged that an agent who incurred a greater cost to gain information had a greater epistemic desire. In two control experiments, we show that these results cannot be explained by a low-level heuristic linking competence with knowledge. Our results suggest that childrens Theory of Mind includes expectations about how costs interact with epistemic desires to produce action.