

No signatures of first-person simulation in Theory of Mind judgments about thinking

Marlene Berke

Yale University, New Haven, Connecticut, United States

Ben Sterling

Yale University, New Haven, Connecticut, United States

Abi Tenenbaum

Yale University, New Haven, Connecticut, United States

Julian Jara-Ettinger

Yale University, New Haven, Connecticut, United States

Abstract

We readily get intuitions about a problem's complexity, how much thinking it will require to solve, and how long it should take, both for ourselves and for others. These intuitions allow us to make inferences about other people's mental processing—like whether they are thinking hard, remembering, or merely mind-wandering. But where do these intuitions come from? Prior work suggests that people try solving problems themselves so as to draw inferences about another person's thinking. If we use our own thinking to build up expectations about other people, does this introduce biases into our judgments? We present a behavioral experiment testing for effects of first-person thinking speed on judgments about another person's thinking in the puzzle game Rush Hour. Although participants overwhelmingly reported solving the puzzles themselves, we found no evidence for participants' thinking speeds influencing their judgments about another person's thinking, suggesting that people can correct for first-person biases.