

# Practicing deception does not make you better at handling it

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## Abstract

In social contexts, learners need to infer the knowledge and intentions of the information provider and vice-versa. In this study, we tested how well participants could infer the intentions of different information providers in the rectangle game, where a fictional information provider revealed clues about the structure of a rectangle that the learner (a participant) needed to guess. Participants received clues from either a helpful information provider, a provider who was randomly sampling clues, or one of two kinds of unhelpful providers (who could mislead but could not lie). We found that people learned efficiently and in line with the predictions of a Bayesian pedagogical model when the provider was helpful. However, although participants could identify that unhelpful providers were not being helpful, they struggled to learn the strategy those providers were using, even when they had the opportunity to practise being a deceptive information provider.