

# Learning from and about others: when reasoning about testimony, children consider both where it came from, and what others believe about its source

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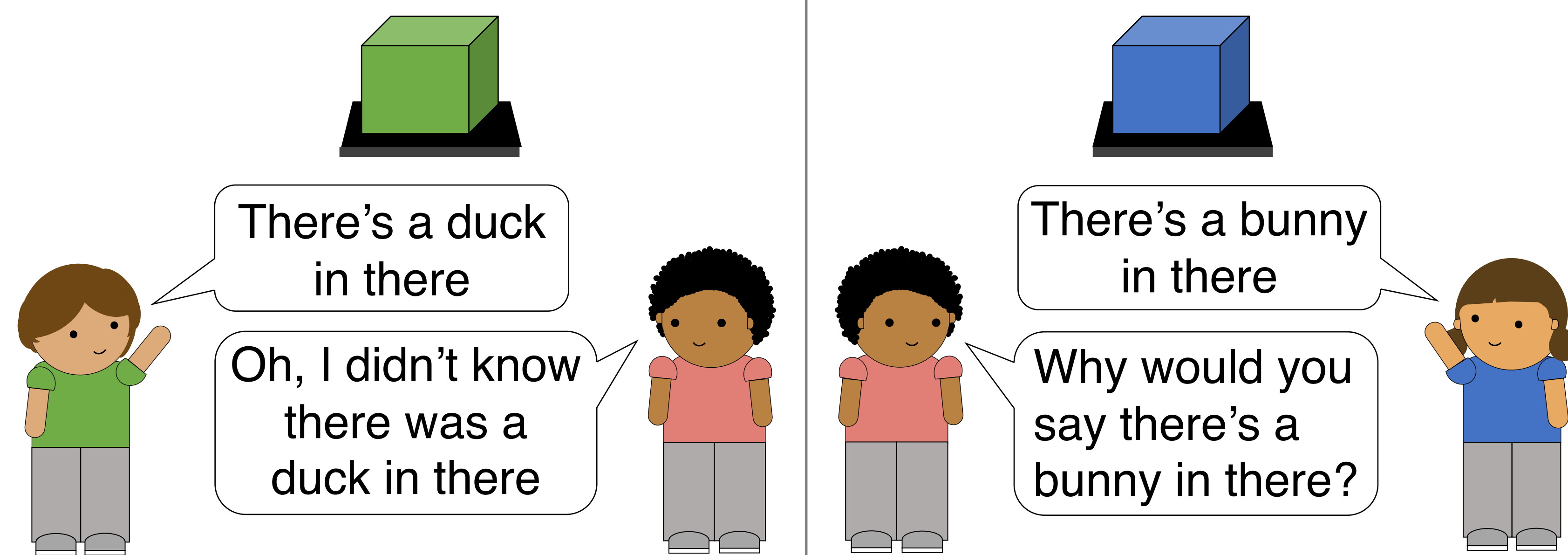
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## Introduction

- We often witness others' interactions as a 3<sup>rd</sup> party. An ability to make epistemic inferences from these interactions could be a critical component of our social cognition.
- However, little research has investigated how children learn about others (and the world) from observing others' interactions.
- Do 4- to 6-year-olds notice whom *others believe*, and infer the epistemic causes behind doubt? Do adults form their *own* beliefs by observing whom others trust?

## Procedure

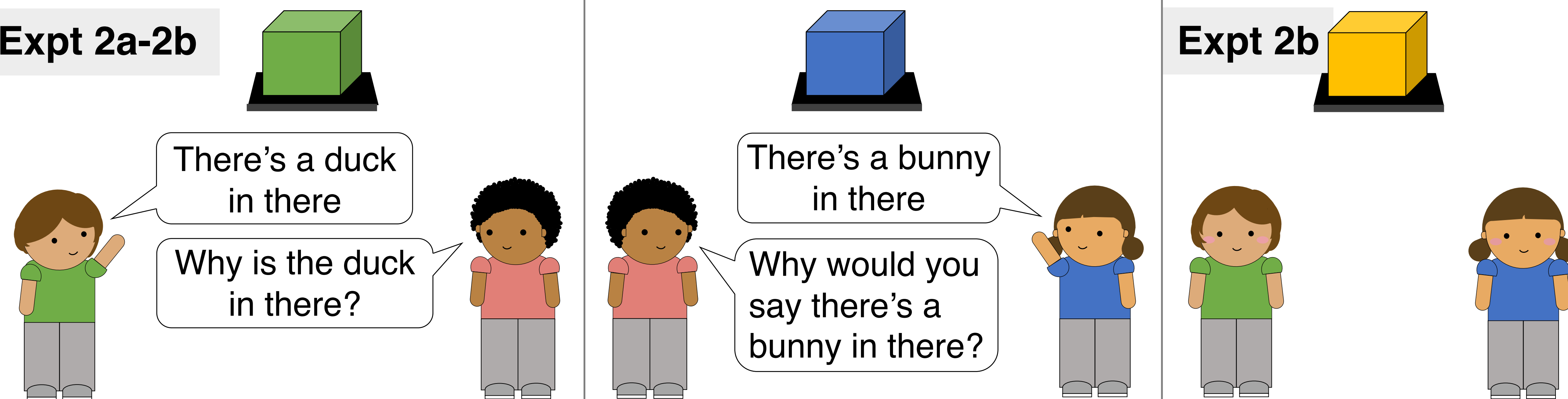
**Experiment 1:** Sam (pink) wants to know what's in the boxes. Each agent tells him what's in a box. Sam *accepts* one agent's testimony, and *questions* the other's.



Expt 1 test q: Sam thinks one of these friends is wrong. Which friend is wrong?

**Experiment 2a-2b** (adults): More tightly controlled, contrasting an *information-seeking* and a *pointed* question.

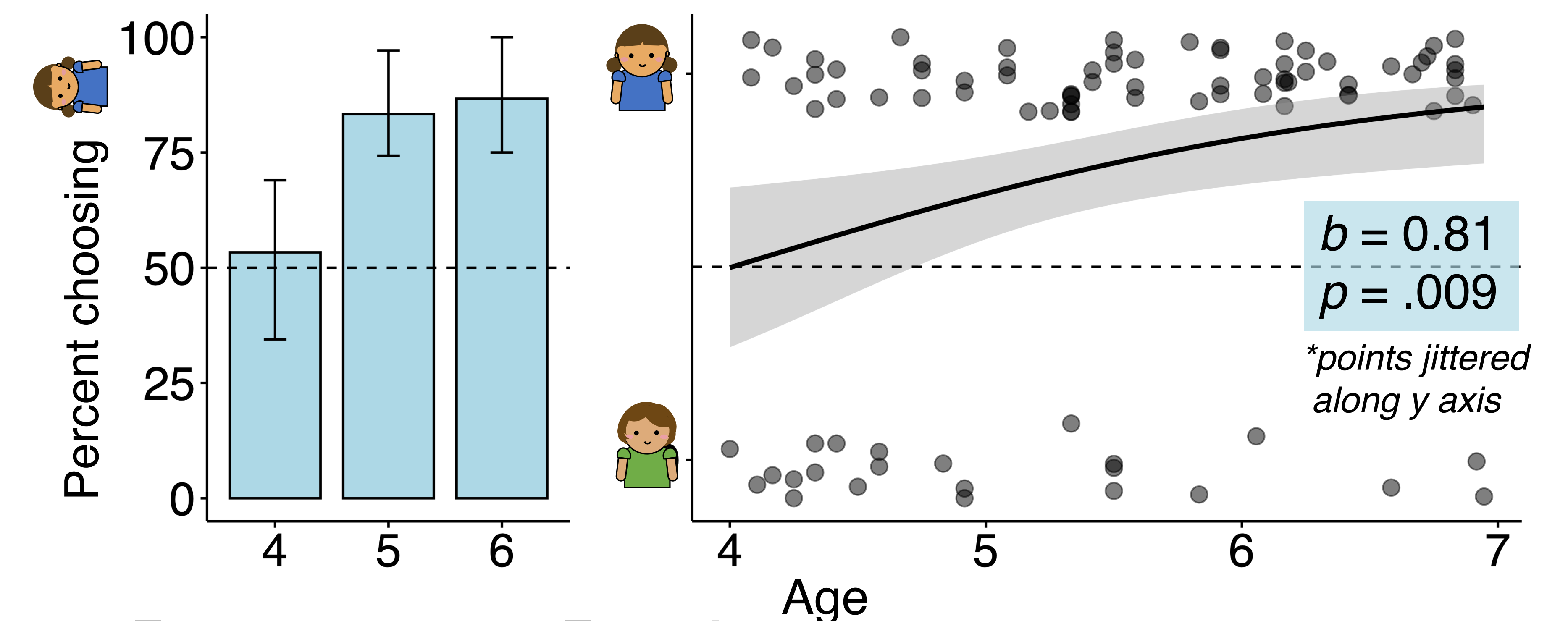
**Expt 2a-2b**



Expt 2a test q: Sam thinks one of these friends is wrong. Which friend is wrong?  
Expt 2b test q: To find out what's in the yellow box, you can ask one person what's there. Who do you want to ask?

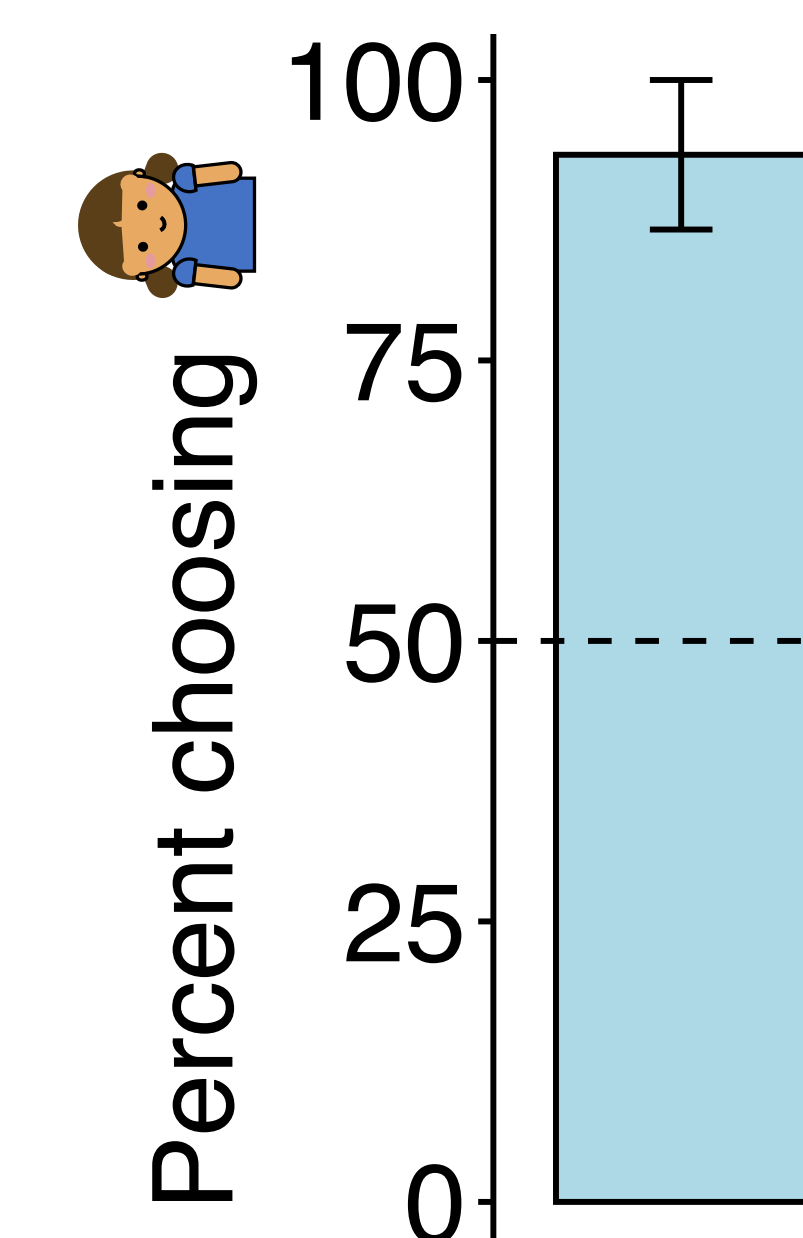
## Results

**Expt 1:** Sam thinks one of these friends is wrong. Who's wrong? (n=90)



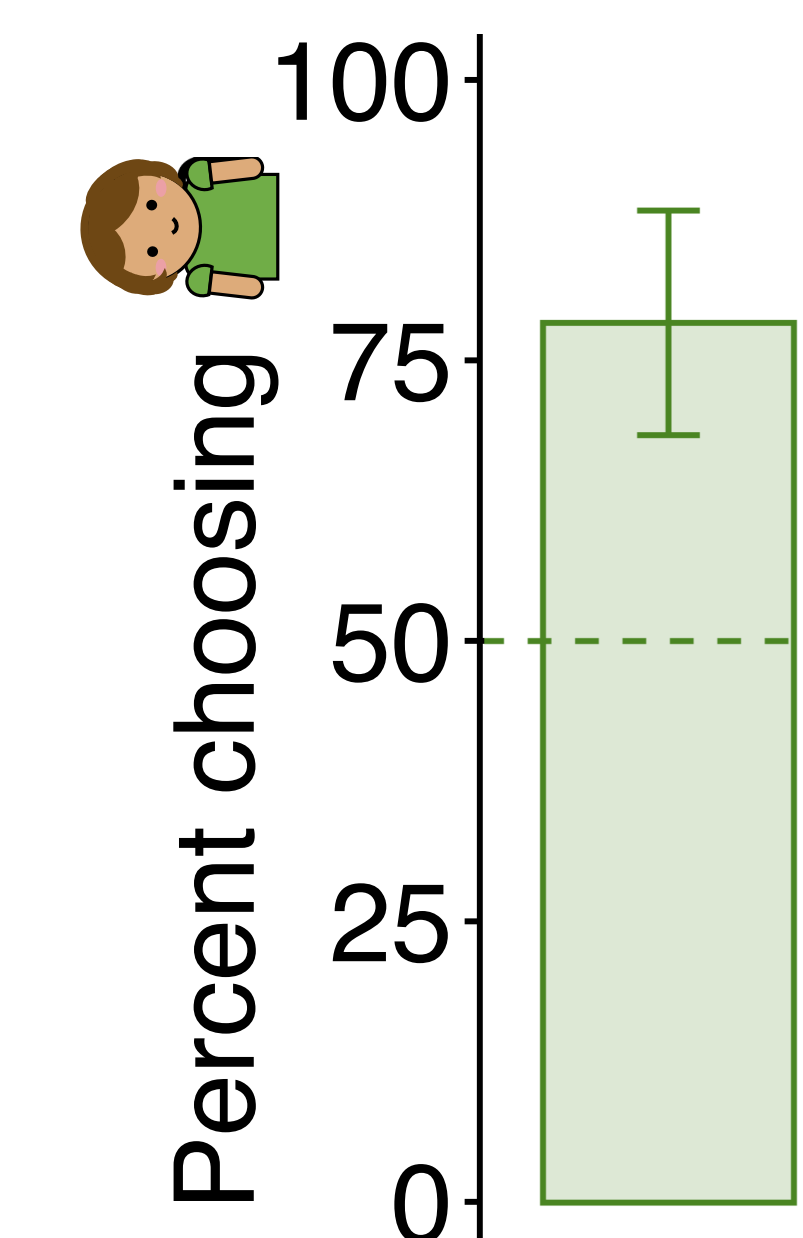
**Expt 2a:**

Who does Sam think is wrong?



**Expt 2b:**

Who do *you* want to learn from?



- 5yo's inferred Sam's belief over each informants' knowledge.
- 4yo's did not.
- In a more tightly-controlled paradigm, adults also inferred who Sam disbelieved (Expt 2a), and avoided learning from this informant (Expt 2b)

## General Discussion

- From age 5, kids notice whom others trust, inferring that an agent disbelieves an informant he pointedly questions
- Adults make the same inference in a more tightly controlled setting, but also infer a person who was disbelieved may *in fact* be ignorant.
- This opens a new area of research, investigating how we learn about others and the world from observing interactions as a 3<sup>rd</sup> party.
- It also opens an important question: can we distinguish disbelief that arises from true evidence of epistemic incompetence vs. bias? What are our underlying assumptions over the reasons for others' distrust?