

# **JUSTIFICATION OF FALSE BELIEF UPDATING IN YOUNG CHILDREN**

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# IS THERE REASON-GIVING IN EARLY CHILDHOOD?

Reasoning and reason-giving is an inferential mechanism that allows us to find and evaluate reasons (Mercier, 2016).

Yet, very little is known about the details of the early development and unfolding of reasoning and argumentation.

What are the social cognitive mechanisms involved in this process?



# DO CHILDREN JUSTIFY THEIR OWN BEHAVIOR?

## ***Our aim is***

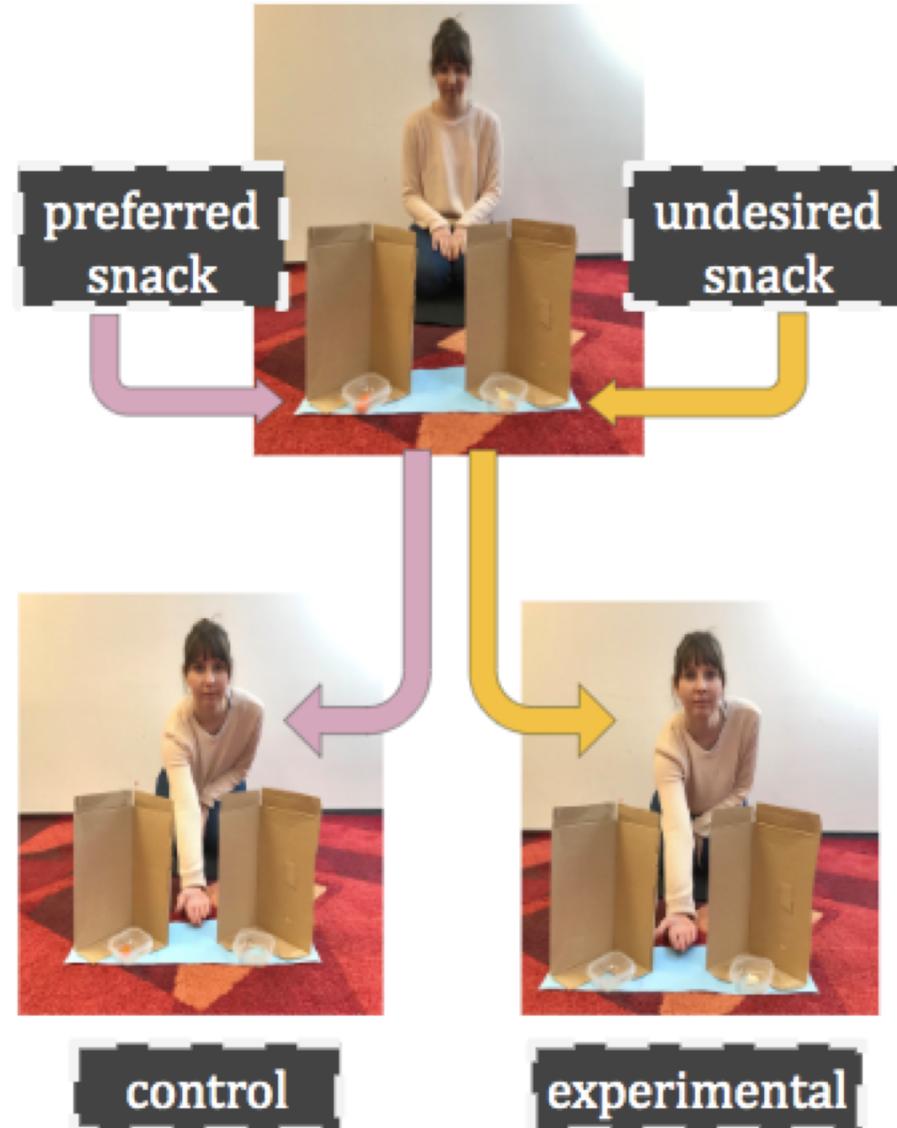
- ***to explore the early emergence of reason-giving ability in young children with a simple, non-verbal task***
- ***to test whether children adjust their communicative actions in order to justify their behaviour,***
- ***when the task at hand requires them to take into account both the knowledge state and the desires of their interlocutor.***

***Specifically, we want to test whether already young children are able to understand when reason-giving is appropriate or even required.***



# PROCEDURE

- P states which food she prefers
- In P's absence, E eats some snacks, which results in only one piece remaining: either from P's preferred (control condition) or undesired kind (experimental condition).
- Upon returning, P requests a snack.
- We record whether the participant shares any food with P, as well as participant's communicative behaviour.



# PARTICIPANTS:

## Study 1

42-to-48 months-old children

*N=49, M= 3;8 [years;months], range=3;6-3;11; 21 female*

## Study 2

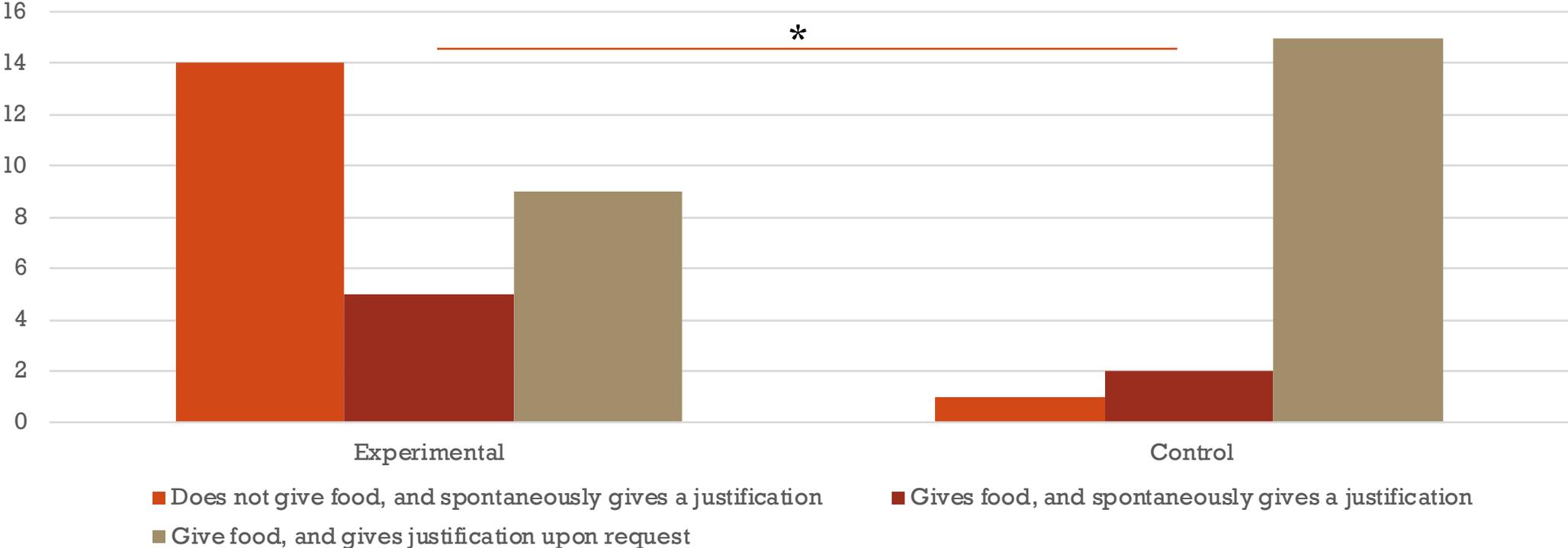
18 months-old toddlers

*N=24, M = 17;3 [months;days], range= 16;3-18;2; 10 female*



# RESULTS

3-year-olds



# RESULTS

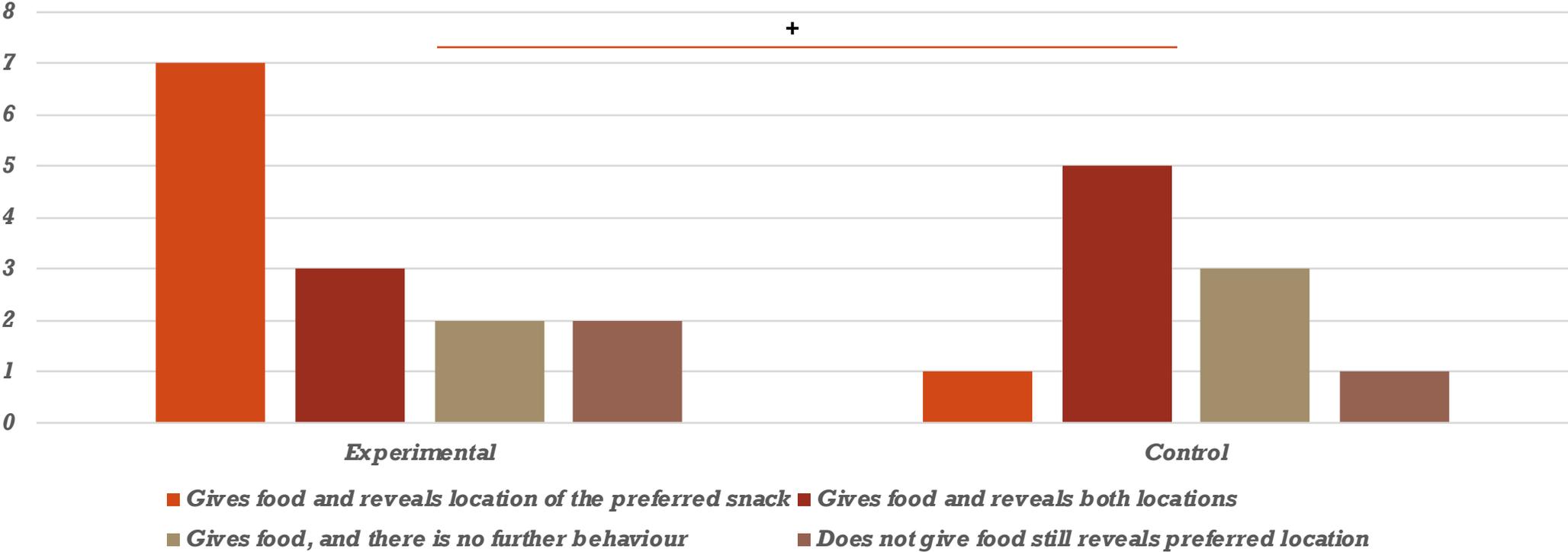
Children interpreted the two conditions differently:

- they declined giving any food to the protagonist in the experimental condition more often, than in the control condition (*Fisher's exact test:  $p=.013$* ).
- they showed sensitivity to the different epistemic states of the protagonist generated in the two conditions and tended to justify their behaviour spontaneously more often in the experimental condition compared to the control condition (*Fisher's exact test:  $p=.001$* ).



# RESULTS

*18-month-olds*



# RESULTS (STILL PRELIMINARY)

18-month-olds :

- gave food to the protagonist in both conditions.
- yet they behaved similarly to older children, they revealed more frequently the occluder or empty box of the preferred snack in the experimental condition compared to the control condition at a tendency (Chi square (df=2) 4.855 ; p= 0.08825).



# CONCLUSIONS

*3,5-years-old children were able to identify situations when justification were needed depending on both the knowledge state and the desire of their partner.*

*The high rate of refusal to share followed by immediate justification in the experimental condition indicates that children understood that the protagonist asked for a snack, but her needs -in light of her preferences- can not be fulfilled adequately in the current situation and they needed to update her knowledge.*

*Children inferred, that although the protagonist asks generally for a snack, she would not be satisfied with the non-preferred snack that they could share, so they chose not to help with giving something*

*18-months-olds were cooperative, they provided food and also provided information.*

