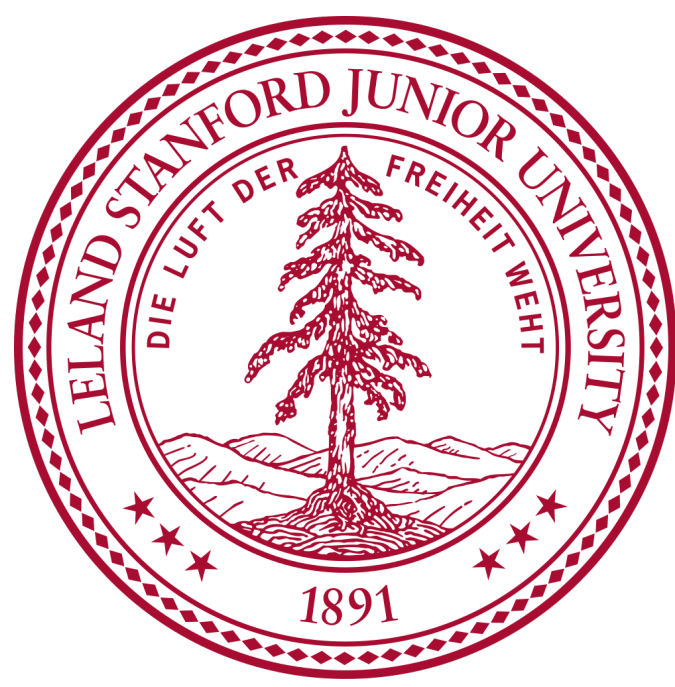


Children’s Comprehension of the Presupposition Trigger “too”

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Introduction

PROJECTIVE CONTENT is a type of meaning unaffected by entailment canceling operators such as negation and questions. A lexical item or construction that encodes PROJECTIVE meaning is called a TRIGGER. For example, “too” is a presupposition trigger:

- (1) We have a FROG *too*!
 - a. We have a frog. (At-Issue)
 - b. We have something else. (Presupposed)

The Mapping Problem of Triggers How do children learn the meaning of triggers? Both with respect to their content and their projective status.

In this study I focus on two questions:

Question 1 At what age do children understand the meaning of the presupposition trigger *too*?

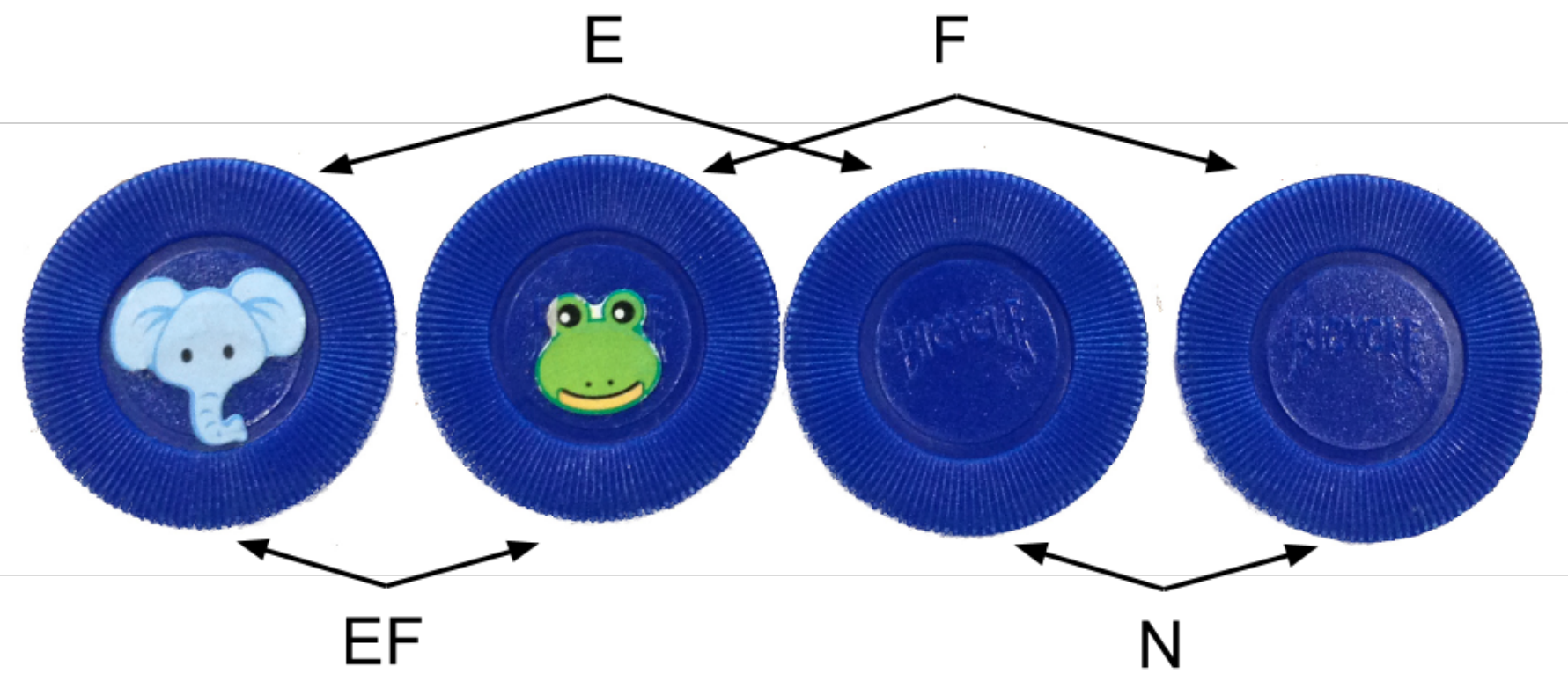
Question 2 Do children consider the content of *too* as projective? Is there a stage at which they know the meaning but they consider it as non-projective?

Question 1 has been investigated in other languages. Some studies suggested that preschool children cannot interpret *auch* in German [4], *ook* in Dutch [2], or *mo* in Japanese [5]. However, other studies suggest that children as young as three can successfully interpret *auch* [3, 1]. No previous study has addressed Question 2.

Experimental Study

Participants 36 children (3;4 - 5;7, M=4;7).

Materials 4 poker chips. 1 with an elephant sticker, 1 with a frog sticker, and two blank. The back of all the chips were blank.



Conditions four within-subject:

- (1) Baseline (2) Control (3) Trigger (4) At-issue

Procedure

The experimenter put the chips face-down on the table; mixed them up, and picked two chips and put them in front of the child. The child was asked to guess which two chips were picked from the four possibilities: elephant and frog (EF), elephant and blank (E), frog and blank (F), and two blanks (N).

Baseline The game was played for two rounds to measure children’s biases for the outcomes.

Control Same as “baseline” except the experimenter said he is going to take a peek at the chips. Then he peeked at the first chip and wondered out loud “Do we have an X (elephant/frog)?”. He peeked at the second chip and said “Yes/No!” depending on the outcome. (2 positive and 5 negative trials)

Trigger Same as “control” except the experimenter asked: “Do we have an X, too?”. (1 positive and 2 negative trials)

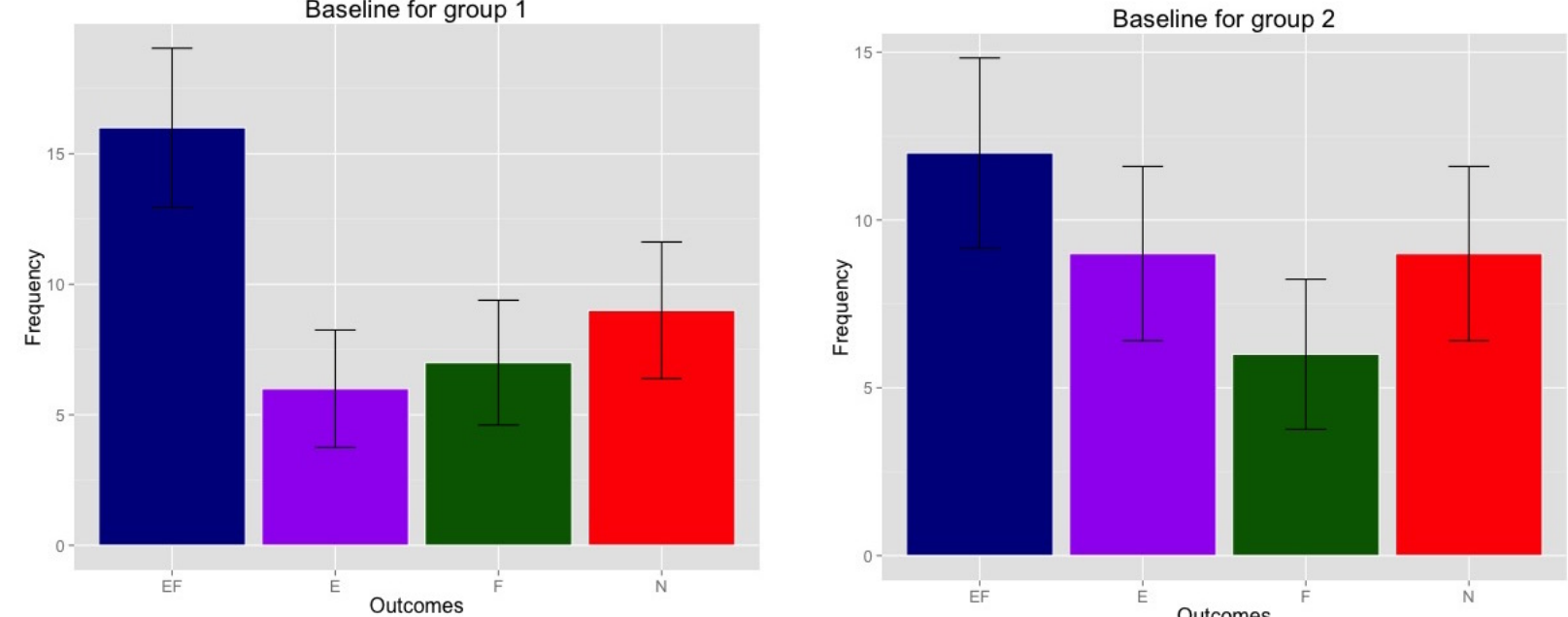
At-issue This time, the experimenter asked: “Do we have an X and a Y?”. (1 positive and 2 negative trials)

All sessions started with the baseline trials and continued with a randomized order of trials from the other three conditions.

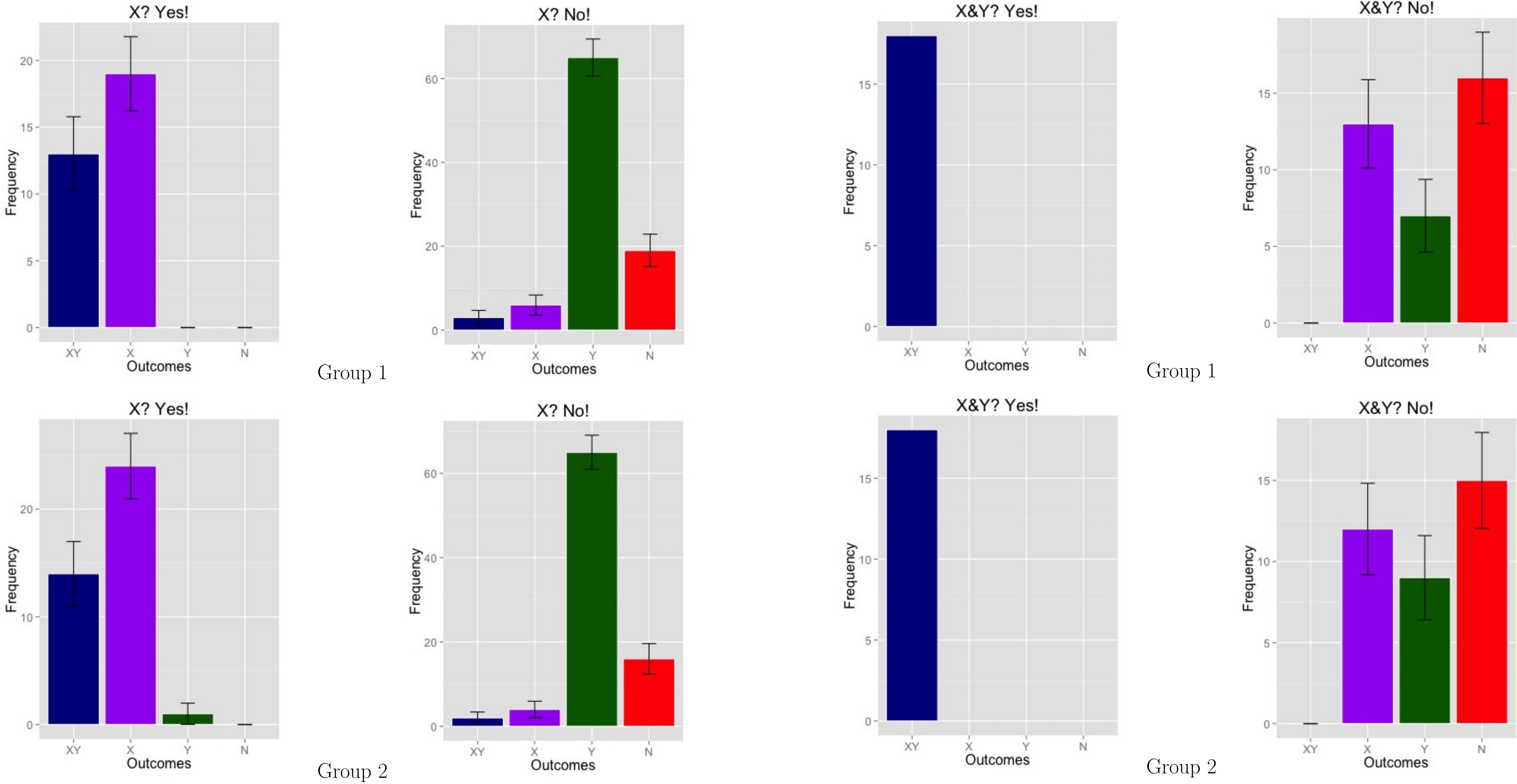
Results

Children were divided into two groups: Group 1 (N=18, 3;4-4;9) and Group 2 (N=18, 4;9-5;7). Multinomial Logistic Regression ({mlogit} in R) was used for statistical modeling.

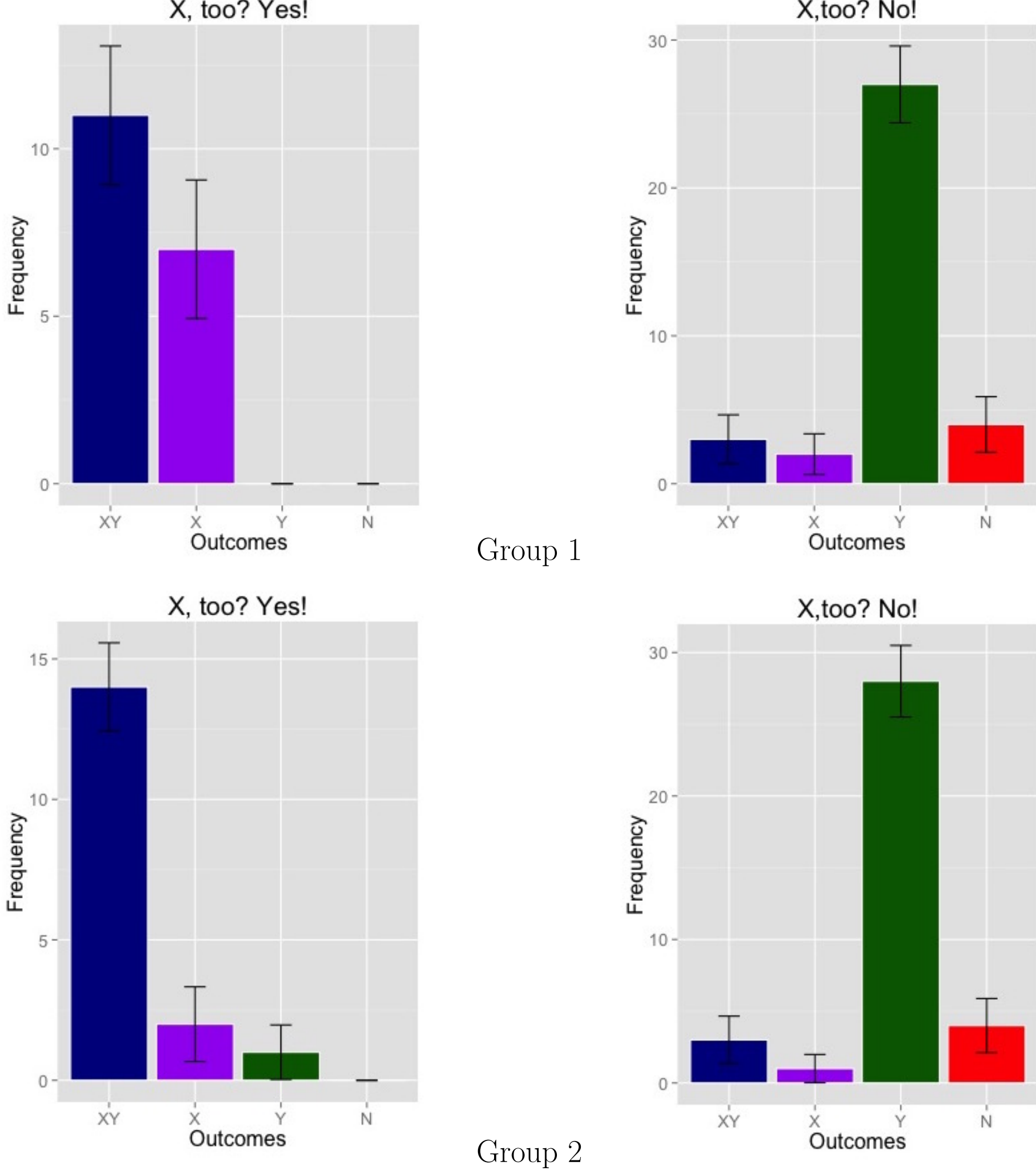
Baseline The results for this condition showed a uniform distribution approximately.



Control Both age groups were at chance between EF and X (the item mentioned) when the response was positive. When the response was negative, children in both age groups chose Y (the salient alternative) more often ($t_{G1} = 4.72$, $p_{G1} < 0.001$; $t_{G2} = 5.023$, $p_{G2} < 0.001$).



Trigger When the response was negative, the results were similar to “control”. When it was positive, the older group showed a significant preference for XY over X ($t = 2.57$; $p < 0.05$), unlike the younger group who were at chance.



At-issue All children in this condition chose EF when the response was positive. When the response was negative, the guesses in both age groups showed an approximately uniform distribution over X, Y, and N.

Discussion

In this study, children in the older age group (4;9-5;7) managed to interpret “too” successfully as a trigger. The younger children (3;4-4;9), however, did not use the semantic contribution of “too” in the context of the guessing game. This could be either due to not knowing the meaning of “too” or alternatively a different interpretation of it in the experimental context. Further investigation is needed to determine the source of this failure. No evidence was found for a non-projective interpretation of “too”.

Acknowledgements

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