

# How much do you know? Children's generalization of cultural knowledge

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## Introduction

- In middle childhood, children are sensitive to expertise (e.g., Boseovski, Marble, & Hughes, 2016; Boseovski & Thurman, 2014) and informants' learning strategies (Bridgers, Gweon, Bretzke, & Ruggeri, 2018) in their evaluations of informants' knowledge.
- Children are also sensitive to cultural identity or group differences (Bigler & Liben, 2007) and might use cultural identity as an additional learning cue for culturally-related knowledge (e.g., customs and practices).
- In a novel cultural context, children's personal experiences of learning from people (Rogoff, 2014) and books (Wells & Zeece, 2007) might affect their perceptions of cultural experts who acquired knowledge through one of these methods.
- We examined how 6- to 9-year-olds use cultural identity (i.e., American vs. a novel foreign identity) and informant learning method (i.e., from a book vs. from a person) to evaluate the extent to which informants with equal knowledge for one cultural practice would have equal knowledge for additional cultural learning topics.
- We also explored the relation between children's semantic and organizational language ability and their evaluations of cultural knowledge. Individual differences in this ability could explain how children compare two individuals on the basis of cultural identity or how children compare two different learning methods.

## Method

- 93 6- to 9-year-olds participated (younger: 6- to 7-year-olds and older: 8- to 9-year-olds).
- Participants heard two stories about a foreign informant (i.e., from the novel target country, unfamiliar to participants) and an American informant (i.e., an in-group member for participants) who each had some expertise in a novel cultural practice (e.g., carving a decorative table from the target country).
- This study used a 2 (age: 6.0-7.9 vs. 8.0-9.9 years) x 2 (informant learning method: foreign-person teaching vs. foreign-book learning) between-subjects design. In each age group, half of the participants heard about a foreign informant who learned from a person and an American informant who learned from a book; these contingencies were reversed for the remaining half of participants.
- Participants answered five forced-choice questions that assessed the generalization of cultural knowledge (see Results). Participants received a score of 0 for choosing the American informant and a score of 1 for choosing the foreign informant.
- Participants completed the relational vocabulary subtest of the Test of Language Development- Primary (4<sup>th</sup> edition; Newcomer & Hamill, 2008), which assesses children's ability to express relationships between two objects (e.g., a pen and a pencil).

## Figure 1.

### Sample story and stimuli

#### Foreign: Learning from a person

When Sophia was growing up, she used to make Paratan tables while sitting with her mom at home in the living room. These tables are used for special holiday meals in her country and Sophia used to make these tables with her aunts and cousins too. Sophia sat with her mom and carefully watched her put the table legs into the table top. When Sophia was ready to make a Paratan table, her mom showed her how to carve each piece of the table top. Sophia's mom told her, "First you carve out the biggest circle. Then you twist it into a table leg, before carving out the next circle." Sophia made these tables many times with her mom and today Sophia is making one of these Paratan tables on her own.

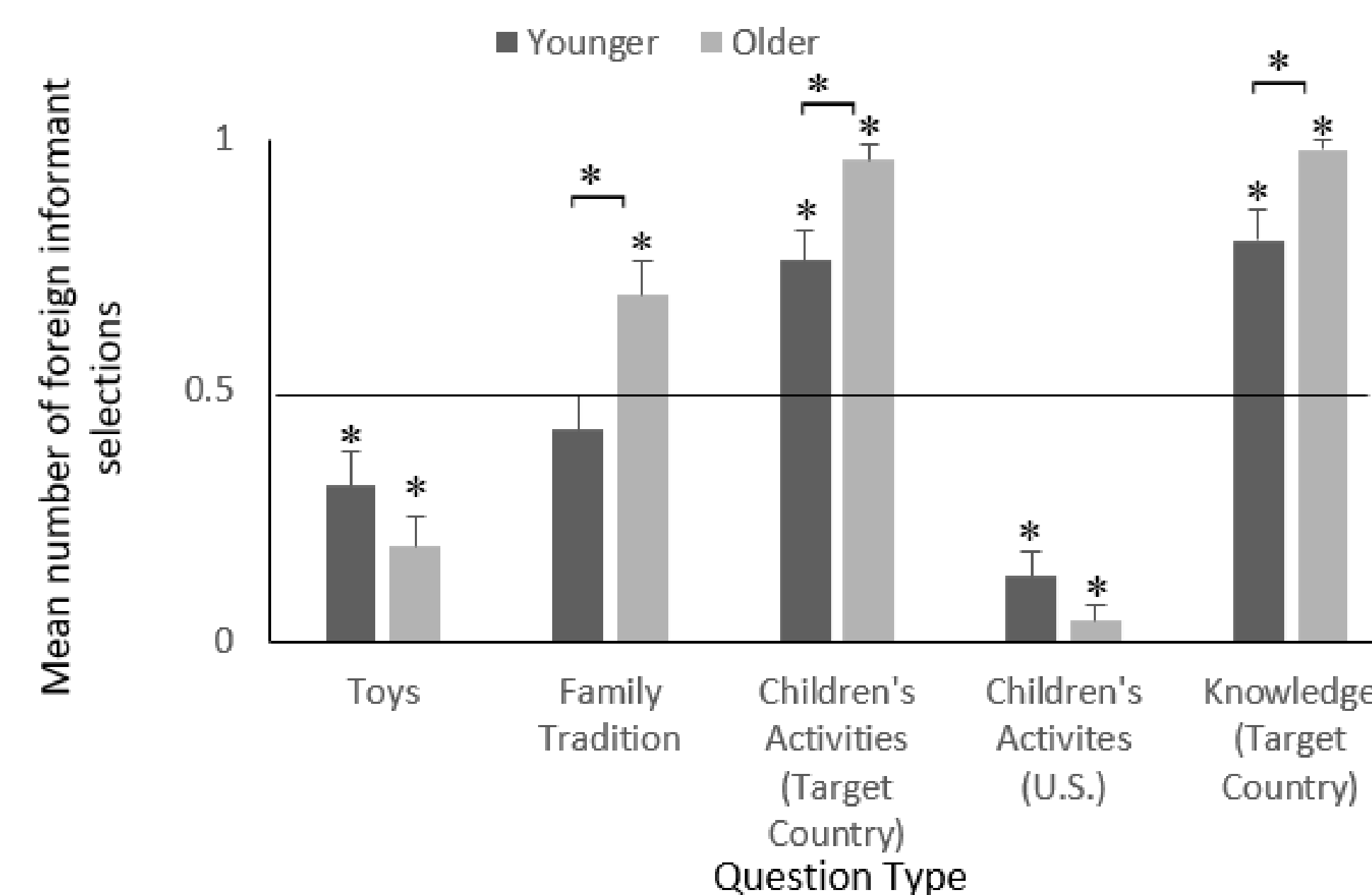
#### American: Learning from a book

When Julia was growing up, she used to read a book about Paratan tables while she was at school with her friend. These tables are very special to the people that live in Paratan so they make these tables a lot. Julia read the book about Paratan tables and looked at the pictures showing how to put the table legs into the table top. When Julia was ready to make a Paratan table, she got some wood to carve the circle pieces for the table top. From the book Julia read, "First carve out the biggest circle. Then twist it into a table leg. Next, carve out another circle for the top." Julia made these tables many times while using this book and today Julia is making one of these Paratan tables on her own.



## Figure 2.

### Children's selection of the foreign informant by question type and age



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## Results

- See Figure 2 for comparisons between age groups and tests against chance for each of the five questions.
- A logistic regression was conducted for each of the knowledge questions with age in months and the relational vocabulary score as continuous variables, informant learning method as a categorical variable, and the interaction variable of age in months by informant learning method.
- "Who would know more about toys?"*
- Higher relational vocabulary scores were associated with endorsing the American informant,  $\beta = -0.11$ ,  $Wald = 4.23$ ,  $p = 0.04$ .
- "Who would know more about how to get ready for a family tradition?"*
- The overall model was significant  $\chi^2 (4, N = 93) = 9.76$ ,  $p = 0.05$ , Nagelkerke  $R^2 = 0.13$ , but there were no significant effects of any predictors (all  $p$ 's  $> .10$ ).
- "Who would know more about what children [from the target country] like to do for fun?"*
- Higher relational vocabulary scores were associated with endorsing the foreign informant,  $\beta = 0.15$ ,  $Wald = 4.32$ ,  $p = 0.04$ .
- "Who would know more about what children from the United States like to do for fun?"*
- With age, children endorsed the American informant more than the foreign informant,  $\beta = -0.11$ ,  $Wald = 3.70$ ,  $p = 0.05$ .
- "Who would know more about [the target country]?"*
- The overall model was significant  $\chi^2 (4, N = 93) = 21.81$ ,  $p < 0.001$ , Nagelkerke  $R^2 = 0.42$ , but there were no significant effects of any predictors (all  $p$ 's  $> .10$ ).

## Discussion

- Despite information that both the American and foreign informants were knowledgeable, children did not infer additional cultural knowledge for each informant equally. In middle childhood, informant cultural identity may be a powerful cue for children's understanding of how novel cultural knowledge is acquired.
- Older children demonstrated more sensitivity than younger children to the potential implications of cultural identity on an informant's broader knowledge about the target culture. This finding suggests that increased social acumen (Nesdale, 2013) may contribute to more than developmental changes in social group biases. With age, children may perceive cultural identity as an influence on both the quality and quantity of cultural knowledge.
- However, older children were more likely than younger children to assume that a foreign informant would know more about family traditions. This finding might suggest that 8- to 9-year-olds stereotype unfamiliar cultures as having more traditional practices than American culture (Rogoff, 2014).
- Children with better relational vocabulary scores may have been able to capitalize on a general ability to organize items semantically to reason thoughtfully about an unfamiliar domain of knowledge. Future research should examine how this ability might relate to children's categorization of individuals and subsequent endorsement of sources of information (Danovitch & Noles, 2014).