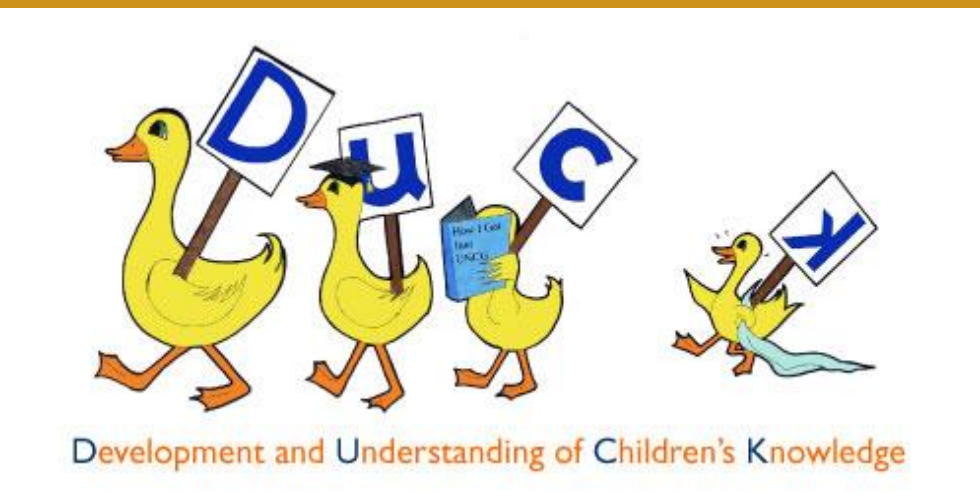


Who would you rather learn from? Children’s justification of informant preferences in cultural learning

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Introduction

By 4 years of age, children rely on expertise to evaluate the accuracy of information provided by others (Lutz & Keil, 2002). However, children are also susceptible to in-group biases (e.g., race: Shutts, Banaji, & Spelke, 2010; accent: Kinzler, Corriveau, & Harris, 2011; gender: Ma & Woolley, 2013) and other age-related biases (e.g., positivity bias; Boseovski & Thurman, 2014) that can interfere with the ability to process expertise information appropriately.

We examined whether 3- to 7-year-olds prioritize expertise information (cultural expert vs. non-expert) or in-group status (same-race or Samoan informant) to learn about a novel cultural practice (i.e., how to make Samoan art). The novelty associated with learning about unfamiliar cultural artifacts may be especially likely to evoke in-group biases (e.g., as compared to learning about an unfamiliar object in one’s own culture).

We also examined whether cognitive inhibition predicted children’s learning preference. Children who can inhibit an automatic response to follow a rule (Kochanska, Murray, Jacques, Koenig, & Vandergeest, 1996) may also be able to inhibit an in-group bias that can be an automatic preference in many contexts (Bigler & Liben, 2007).

We expected that with increasing age, children would be more likely to endorse learning from a Samoan expert rather than a same-race informant. We also anticipated that stronger cognitive inhibition skills would be associated with expert selections independent of age.

Method

119 3- to 7-year-olds were told about two gender-matched informants that differed by group status: in-group (non-expert) versus Samoan (expert). Then, participants heard information about the informants’ backgrounds and familiarity with a Samoan practice (i.e., artwork named “siapo,”); see Figure 1.

Participants were asked a learning preference question: “If you wanted to learn how to make siapo, who would you rather learn from?”, and were given a score of 0 for choosing the in-group informant and 1 for choosing the Samoan informant.

Participants were asked to explain their selection. Explanations were coded for references to informant nationality, learning experience, perceptual features of stimuli, or “other” (e.g., intelligence or stating than an informant was simply “right”).

For the cognitive inhibition measure, participants were told to follow the instructions of a bear puppet but not those of a dragon puppet (Bear Dragon task; Kochanska et al., 1996). Participants received a score of 3 for correct inhibition or correct movement, 2 for a partial movement, 1 for a wrong movement, and 0 for incorrectly inhibiting or failing to inhibit a movement.

Results

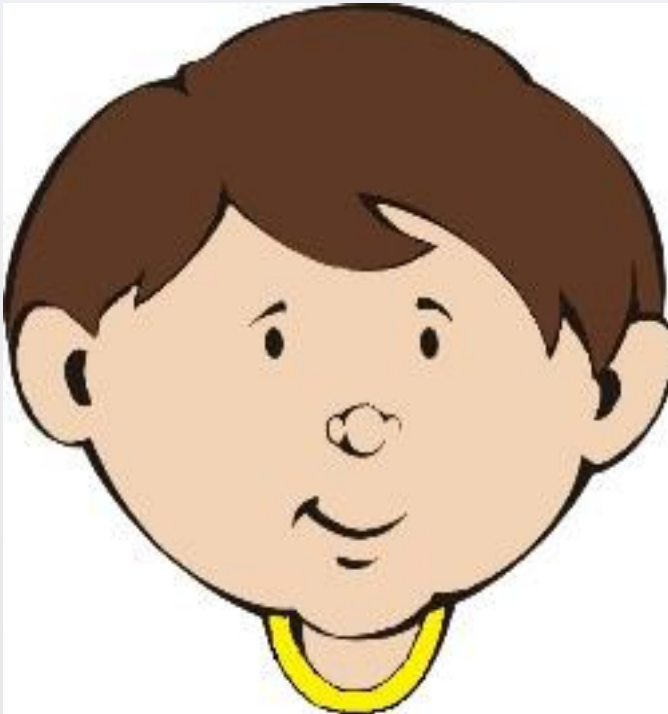
For the learning preference question, logistic regression analysis revealed that younger children were significantly more likely than older children to prefer to learn from the same-race informant ($\beta = .47$, $Wald = 5.87$, $p = .02$; see Figure 2).

- With increasing age, children provided more appropriate explanations of their selection, $\chi^2(4) = 47.31$, $p < .001$.


Participants who selected the Samoan expert informant were more likely to refer to nationality or learning method/prior experience as the reason for their selection while participants that selected the same-race informant were more likely to provide "other" explanations, $\chi^2(4) = 22.46$, $p < .001$; $\kappa = .88$, $p < .001$ (see Figure 3).

For the Bear Dragon task, logistic regression revealed a significant effect of inhibition performance over and above age ($\beta = -.068$, $Wald = 3.94$, $p = .05$): Participants who demonstrated better cognitive inhibition on Bear Dragon were more likely to prefer to learn from the Samoan informant.


Figure 1. Sample story and Stimuli



“This is Kevin. Kevin is a boy your age. Kevin is from around here and he dresses in regular clothes, just like you. Kevin grew up in a house like yours and he went to a school that is like yours. Kevin learned about Samoan art from watching a special art T.V. program.”



“This is Etano. Etano is also a boy your age, but Etano is not from around here, and he dresses like the people from where he lives. Etano grew up in a different kind of house and he went to a different kind of school. Etano learned about Samoan art from watching his mom and grand-mom make Samoan art.”

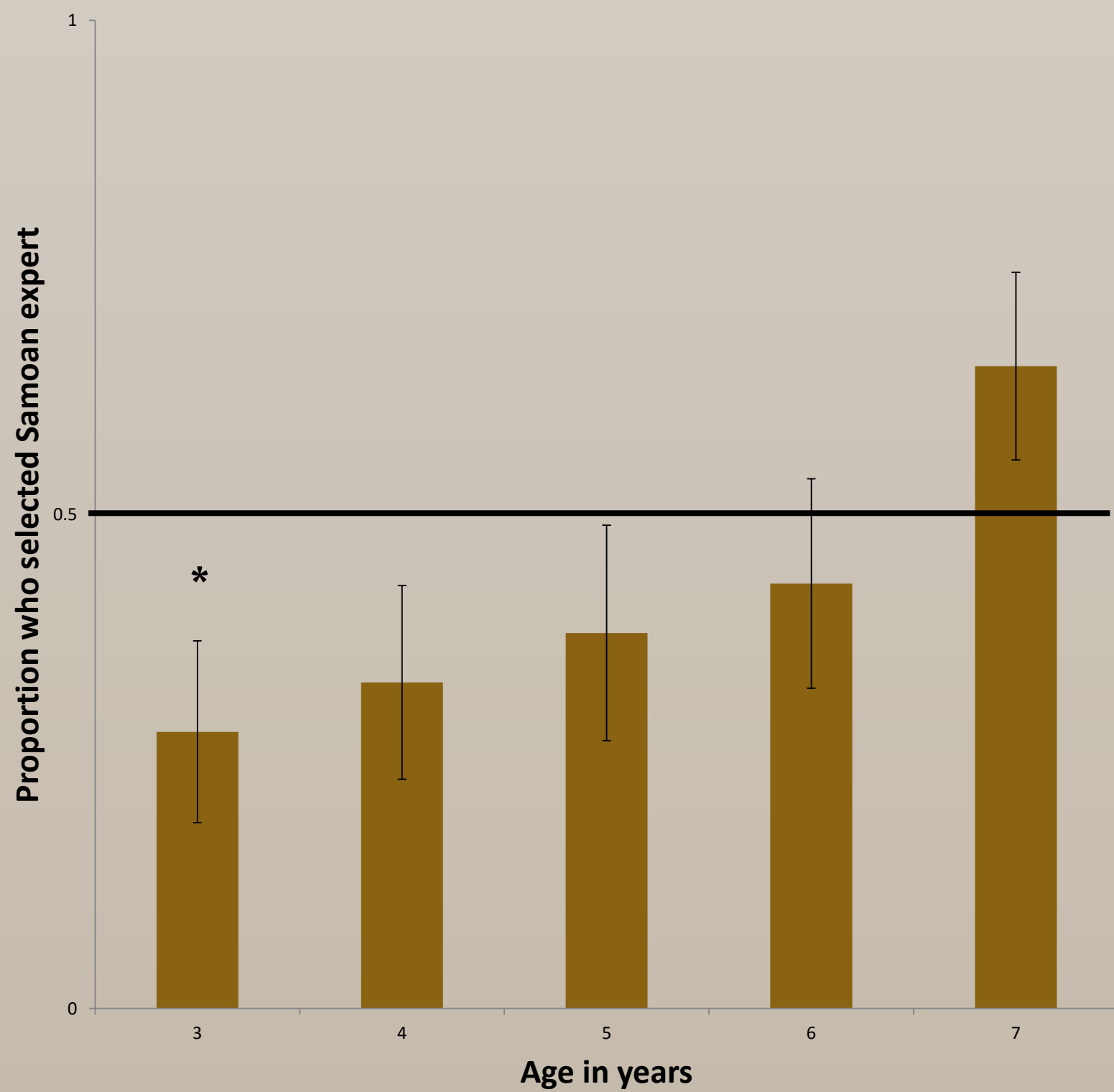


“Kevin looks at this picture of Siapo and says that it is a rug made out of cloth like his shirt.

Etano looks at this picture of Siapo and says that it is a blanket made from tree bark.”

Figure 2.

Proportion of participants who selected Samoan informant by age



Discussion

Cultural domains represent some of the earliest settings in which learning takes place (Koenig & Sabbagh, 2013). In these situations, children learn from multidimensional people whose race or ethnicity (among other factors) might convey knowledge. It is important for theoretical models of children’s social learning to account for this real-world complexity.

When asked about preferences for future learning, children’s ability to inhibit an in-group bias predicted endorsement of an out-group member with expertise. This finding supports the idea that in-group biases are automatic responses (Bigler & Liben, 2007), but can be overcome to accept relevant expertise.

It is unclear why younger children selected the in-group informant more than older children. Younger children may have relied on perceptually salient cues to social categories that were activated by the stimuli. This strategy could have helped them to remember the same-race informant better (e.g., Shutts & Kinzler, 2007). Alternatively, background information could have emphasized the familiarity of the same-race informant (e.g., “children just like you”), activating in-group biases (Bigler & Liben, 2007).

Future research could resolve how in-group biases based on cultural group membership interfere with children’s acceptance of relevant expertise in cultural and other domains. It is important to investigate how to reduce the interference of irrelevant cues when they compete with expertise. Research could elucidate ways to strengthen trust of unfamiliar experts in settings such as the classroom, which is important given increasing diversity among teachers and peers.

Figure 3.

Percentage of participants who provided each type of explanation for the future learning question.

	I don't know/No response	Nationality/Residence	Learning/Prior experience/General testimony	Perceptual	Other	Total
Same-Race Informant	23.2%	4.3%	14.5%	10.1%	47.8%	100%
Samoan Expert	24.0%	28.0%	26.0%	6.0%	16.0%	100%

References

Bigler, R. S., & Liben, L. S. (2007). Developmental intergroup theory: Explaining and reducing children's social stereotyping and prejudice. *Current Directions in Psychological Science*, 16(3), 162-166.

Boseovski, J. J., & Thurman, S. L. (2014). Evaluating and approaching a strange animal: Children's trust in informant testimony. *Child Development*, 85(2), 824-834.

Kinzler, K. D., Corriveau, K. H., & Harris, P. L. (2011). Children's selective trust in native-accented speakers. *Developmental Science*, 14(1), 106-111.

Kochanska, G., Murray, K., Jacques, T. Y., Koenig, A. L., & Vandergeest, K. A. (1996). Inhibitory control in young children and its role in emerging internalization. *Child Development*, 67(2), 490-507.

Koenig, M. A., & Sabbagh, M. A. (2013). Selective social learning: New perspectives on learning from others. *Developmental Psychology*, 49(3), 399-403.

Lutz, D. J., & Keil, F. C. (2002). Early understanding of the division of cognitive labor. *Child Development*, 73(4), 1073-1084.

Ma, L., & Woolley, J. D. (2013). Young children's sensitivity to speaker gender when learning from others. *Journal of Cognition and Development*, 14(1), 100-119.

Shutts, K., Banaji, M. R., & Spelke, E. S. (2010). Social categories guide young children's preferences for novel objects. *Developmental Science*, 13(4), 599-610.

Shutts, K., & Kinzler, K. D. (2007). An ambiguous-race illusion in children's face memory. *Psychological Science*, 18(9), 763-767.