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Who Knows Best? Preschoolers Sometimes Prefer Child Informants over Adult Informants

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Do preschoolers think adults know more about everything than children? Or do they recognize that there are some things that children might know more about than adults? Three-, four-, and five-year olds ($N = 65$) were asked to decide whether an adult or child informant would better be able to answer a variety of questions about the nutritional value of foods and about toys. Children at all ages chose to direct the food questions to the adult and the toy questions to the child. Thus, there are some kinds of information for which preschoolers expect that a child would be a better informant than an adult. Copyright © 2008 John Wiley & Sons, Ltd.

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Much of our knowledge is based on information that other people have provided to us rather than on first-hand, direct experience. For example, if I wanted to know the benefits of eating foods rich in antioxidants, I would consult a doctor rather than conducting my own experiments. If I wanted to know the special code to use to give myself extra powers in a videogame, I would consult a gamer rather than trying to figure it out myself. As adults, in addition to recognizing the limitations of our own expertise, we recognize that other people are similarly limited. As a result, we selectively seek out particular people depending on the type of information we are looking for: a doctor is probably a better source of information about antioxidants than a gamer, and a gamer is probably a better source of information about videogames than a doctor.

Even very young children have some understanding of this division of cognitive labor (e.g. Danovitch & Keil, 2004, 2007; Keil, 2006; Lutz & Keil, 2002). For example, Lutz and Keil (2002) asked whether preschoolers would make inferences about a person's likely knowledge based on his or her profession. In that study, they found that children as young as 3 years of age expected that a doctor would know more about how to fix a broken arm than a car mechanic, but that a car mechanic would know more about how to fix a flat tyre than a doctor.

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The study reported here asks whether preschoolers recognize that people may have different pockets of expertise by virtue of their age.

Preschoolers seem to operate with the reasonable expectation that knowledge increases with age: the older you are, the more you know. For instance, Taylor, Cartwright, and Bowden (1991) presented 4- and 5-year olds with three photos: a baby, who 'cannot walk yet;' a 4-year old, who 'goes to daycare just like you;' and a grown-up. Children were asked to judge who would know a given fact. Some of these facts concerned information that the grown-up and 4-year old, but not the baby, would be likely to know (e.g. the meaning of 'happy,' or what a rabbit looks like). Other facts concerned more esoteric information that the grown-up, but neither the 4-year old nor baby, would be likely to know (e.g. the meaning of 'hypochondriac', or what a lemur looks like). Results were straightforward: Participants rarely expected the baby to know any of the facts; they expected the 4-year old to know the simple, but not the more esoteric, facts; and they expected the adult to know all the facts.

In fact, there is some evidence to suggest that young children may see adults as omniscient. For example, Wimmer, Hogrefe, and Perner (1988) asked 3- to 5-year olds whether a doll named 'Monika' would know the contents of a box even if she had not looked inside. Most 5-year olds correctly responded that she would not, but 5-year olds in one particular classroom incorrectly indicated that she would. Wimmer *et al*. were puzzled by these results until they discovered that the headmaster for that class was a woman named 'Monika'. When the experimenters changed the doll's name so that it was no longer the same as that of a familiar adult authority figure, the 5-year olds in that class responded correctly.

Perhaps partly as a result of an expectation about adult omniscience, young children are also more likely to be misled if erroneous information is provided by an adult than if the same erroneous information is provided by a child (Ceci, Ross, & Toglia, 1987; Lampinen & Smith, 1995). In Lampinen and Smith (1995), for example, preschoolers heard a story about a girl named Lauren who ate eggs and got a stomachache. Later, they watched a videotaped interview in which either an adult actor or a child actor answered questions about the story. Some participants heard the interviewee provide incorrect information—for example, that Lauren had eaten cereal and gotten a headache. When these participants later answered questions about the story themselves, they were more likely to provide the erroneous details when they had watched the interview with the adult actor than when they had watched the interview with the child actor.

Although children may have a general expectation that adults are knowledgeable, they do recognize that particular adults may not be. In Lampinen and Smith's (1995) study, for example, when the adult interviewee was introduced as a 'silly man', children were less influenced by the erroneous details he provided than when he was introduced neutrally. A study by Jaswal and Neely (2006) went one step further by asking whether there were some circumstances under which a particular adult's testimony would actually be discounted in favour of a particular child's. In that study, 3- and 4-year olds watched a child actor and an adult actor label a series of familiar objects. Two conditions are most relevant for our purposes. In one, both actors referred to the familiar objects using appropriate names (e.g. a telephone was referred to as a 'telephone' by one actor and a 'phone' by the other). In the other condition of interest, the adult actor referred to each of the familiar objects using an incorrect name and the child actor referred to them appropriately (e.g. the adult actor referred to the telephone as an 'airplane'

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and the child actor referred to it as a 'phone'). Later, in both conditions, children heard the two actors label a series of unfamiliar objects with conflicting novel names (e.g. the adult actor referred to a paint roller as a 'blicket', and the child actor referred to it as a 'wug'), and children had to decide which label applied (see also Koenig, Clément, & Harris, 2004).

When both the child actor and the adult actor had been reliable labelers of familiar objects, participants favoured the novel labels that the adult provided—a finding foreshadowed by the results of Taylor *et al*. (1991). However, when the child actor had labeled familiar objects correctly and the adult actor had labeled the same objects incorrectly, this preference reversed: participants in this condition actually favoured the novel labels provided by the child actor over those provided by the adult. Jaswal and Neely (2006) thus showed that a certain type of behaviour (i.e. inaccurate naming) could lead children to discount information from a particular adult in favour of information from a particular child.

In the study presented here, we were interested in whether there were circumstances in which preschoolers might expect a child to be a better informant than an adult, even when they had no reason to doubt the credibility of the adult. Certainly by adolescence (and much to their parents' chagrin), children no longer assume that adults are the best source for every kind of information (e.g. Bar-tal, Raviv, Raviv, & Brosch, 1991; Young & Ferguson, 1979). For example, Bar-tal *et al*. (1991) found that although adolescents report that they are more likely to rely on adults than their friends when seeking advice about their school work (e.g. how to prepare for exams), they say they are more likely to rely on their friends than adults when seeking advice about pastimes (e.g. what movies to see).

In the present study, we asked children to decide whether an adult or a child would be a better source for a particular piece of information. As noted earlier, conventional wisdom and previous research suggest that preschoolers expect the average adult to be more knowledgeable than the average child (e.g. Taylor *et al*., 1991). But in this previous work, children have been asked about information that adults would be at least as likely to know as children (e.g. the name of an animal or the meaning of a word). In the study here, in contrast, half of the questions concerned things that children might be more likely to know than adults—namely, how or where to play with a toy. The other half of the questions concerned information that, in a child's experience, adults would be more likely to know than children—namely, why or how a particular food is good for you.

In addition to these 'status' questions investigating children's general expectations about the kinds of information likely to be known by an adult versus a child, we included two 'situational' questions at the end of our procedure. These questions served two purposes. The first was to explore whether particular situational factors leading to knowledge may 'trump' status ones. For example, if a food was the child informant's favourite and one that the adult had never even seen before, the child informant might actually know more about it than the adult. Similarly, if a toy was the adult informant's favourite and one that the child informant had never even seen before, the adult might actually know more about it than the child informant. Of interest was whether preschoolers who favoured the adult informant on food status questions and the child informant on toy status questions would show the reverse preference given this particular set of situational circumstances.

The situational questions also served as a check against the possibility that children might develop a response set when responding to the status questions. Given that there were 12 status questions, one could imagine a situation in which children simply stopped paying attention to the subtle differences in the wording

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of the questions and instead used a simple response pattern (e.g. automatically answer 'kid' after hearing the word 'toy'). Since the situational questions called for children to direct the toy question to the adult and the food question to the child, they served as catch questions at the end of the testing procedure.

We focused our investigation on 3- to 5-year olds because this represents the range of ages that has been used in previous work addressing children's understanding of the division of cognitive labor (Danovitch & Keil, 2004, 2007; Keil, 2006; Lutz & Keil, 2002). Although we did not make any predictions about how the participants' age would affect performance on our task, it is possible that the younger children (who presumably have less experience with peers providing useful information) will rely more on the adult informant rather than the peer, regardless of whether the questions concern toys or foods.

METHOD

Participants

Participants were 21 three-year olds ($M = 3.6$, range = 3.0–3.11), 22 four-year olds ($M = 4.5$, range = 4.2–4.10), and 22 five-year olds ($M = 5.5$, range = 5.1–5.11). Approximately half the participants at each age were male. Some children were recruited from their preschool; others were recruited from a database of families who had expressed an interest in participating in research. Most children were White and from middle-class backgrounds.

Materials

We used two identical wooden boxes ($12 \times 12 \times 6.5$ cm), each one with a stick figure affixed to its lid. The stick figures were gender neutral and identical except for size (8×4.5 cm versus 4×2.5 cm). As will be discussed in the Procedure, the larger figure represented the 'grown-up', and the smaller, the 'kid'. In addition, we obtained and laminated 16 colour photographs (7.5×7.5 cm) from a computer database of photo-objects (Hemera Technologies, Canada). Seven of these pictures depicted foods we expected would be unfamiliar to participants (e.g. a star fruit, lychee fruit, a brown stew), and seven showed toys we expected would be unfamiliar (e.g. an abacus, a wind-up toy, a circular frame with a seat and wheels). As will be discussed below, the identity and familiarity of the items depicted in these pictures was actually not important because participants did not see any of the items until after they had completed the study.

Procedure

Participants were tested in the lab or in a quiet room in their preschool. A female researcher sat across a table from the participant and placed two boxes on the table, as far apart as the table allowed, but close enough to be within reach of the participant. She pointed to the large stick figure affixed atop one of the boxes, and introduced it as a 'grown-up, just like your mom' (as in Jaswal & Neely, 2006) and then pointed to the smaller figure and introduced it as a 'kid, just like you'. Left–right position of the boxes was randomly determined.

The researcher next asked the child about his or her favourite foods and toys. She explained that she had some pictures of foods and toys, and that the kid

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knew about some of them and the grown-up knew about others. The researcher explained that she could not remember who knew about which items, and so the child's job was to help her to place those pictures the grown-up would know about in the grown-up's box, and those the kid would know about in the kid's box. Lastly, the researcher tested the child's memory for which stick figure represented the grown-up and which represented the kid. All participants correctly identified the grown-up and the kid.

Following this introduction, the researcher picked up a picture and held it in the palm of her hand so that the child could not see it. She looked at the picture while saying, for example, 'I have a picture of a new toy here that you've never seen before, but I can't remember what this toy does. I think one of our friends can help us. Who would you like to ask? Who do you think would know what this toy does'? Children indicated their selection verbally or by pointing to one of the boxes. The researcher opened the indicated box, put the picture inside, and closed its lid. Importantly, children did not have the opportunity to see the pictures until the end of the procedure so that their responses were based entirely on the content of the questions and the identity of the informants.

There were 14 trials altogether. The first 12 were 'status' trials, on which the only difference attributed to the two informants was that one was a grown-up and the other, a kid. Six of these status trials involved foods and six involved toys. Three of the food questions were, 'Who would know why this food is good for you'? and the other three were, 'Who would know what this food will help you do'? Three of the toy questions were, 'Who would know what this toy does,? and the other three were, 'Who would know where you play with this toy'? The order of the questions was random with the constraint that no more than two food or toy questions appeared in a row.

The 12 status trials were followed by two 'situational' trials, where information was given that might conflict with children's general expectations about what the grown-up and kid were likely to know. On one of these trials, the researcher explained that a particular toy was the grown-up's favourite toy and that the kid had never seen it before. Participants were asked, 'Who would know where you play with this toy'? On the other trial, the researcher explained that a particular food was the kid's favourite and that the grown-up had never seen it before. Participants were asked, 'Who would know why this food is good for you'? The order of the two situational trials was counter-balanced so that half the participants heard the food question first and half heard the toy question first.

At the end of the session, children were invited to open the grown-up and kid boxes, and the researcher spent several minutes talking with them about the foods and toys depicted in the pictures.

RESULTS

In describing and analysing the data, we will present the results as a function of the proportion of trials on which children directed questions to the child informant. Because the task was a two-alternative forced choice, the more often children directed questions to the child informant, the less often they directed them to the adult (and *vice versa*). It is not possible to compare directly the number of toy or food questions directed to the child versus the number of those questions directed to the adult because of the problem of dependence (i.e. the proportion of selections always sums to 1.0). However, chance analyses can serve as a proxy for this. For example, if children direct significantly more toy

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questions to the child informant than expected by chance, this indicates that they directed significantly fewer toy questions to the adult than expected by chance. Preliminary analyses showed no effects or interactions involving gender, so this factor will not be considered further.

Status Trials

Figure 1 shows the results from the status trials. As the figure shows, participants at each age were more likely to direct toy than food questions to the child informant. Indeed, a 3×2 mixed model ANOVA (Age $\times$ Question Type) on these data showed only a main effect of question type, $F(1, 62) = 84.83$, $p < 0.0001$. Children at each age were more likely than chance to direct the toy questions to the child, t's > 4.60, p's < 0.001, and less likely than chance to direct the food questions to the child, t's > 3.20, p's < 0.01.

Analyses at the individual level were consistent with the group analyses. Recall that on the status trials, there were six questions concerning toys and six questions concerning foods. Thus, children could direct more toy than food questions to the child (the predicted pattern), more food than toy questions to the child (the opposite pattern), or an equal number of toy and food questions to the child. In the sample of 3-year olds, 16 (76%) showed the predicted pattern, 2 (10%) showed the opposite pattern, and 3 (14%) directed an equal number of toy and food questions to the child; in the sample of 4-year olds, the corresponding numbers were 19 (86%), 3 (14%), and 0; and in the sample of 5-year olds, the corresponding numbers were 19 (86%), 2 (9%), and 1 (5%). The distribution of responses did not differ as a function of age, χ^2 (4, $N = 65$) = 4.14, ns. At each age, more children directed more toy than food questions to the child than would be expected by chance (two-tailed Binomial Tests, chance probability[1] = 0.43, p's < 0.01).

Situational Trials

Figure 2 shows results from the two situational trials—one trial on which the food was described as the child's favourite and one the adult had never seen

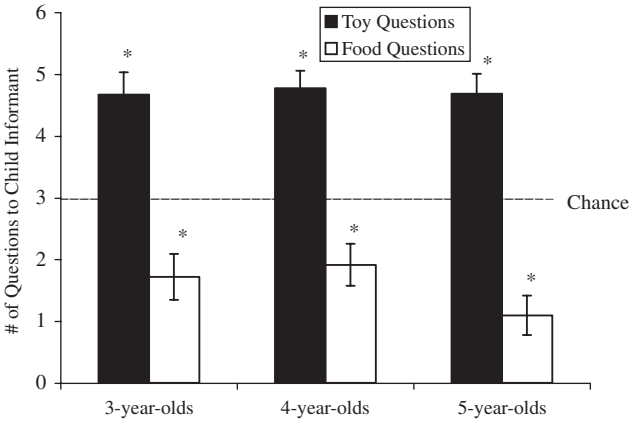

Figure 1. Number of toy and food questions (maximum = 6 each) addressed to the child informant on status trials. Error bars show SEM. Asterisks indicate different from chance, $p < 0.01$.

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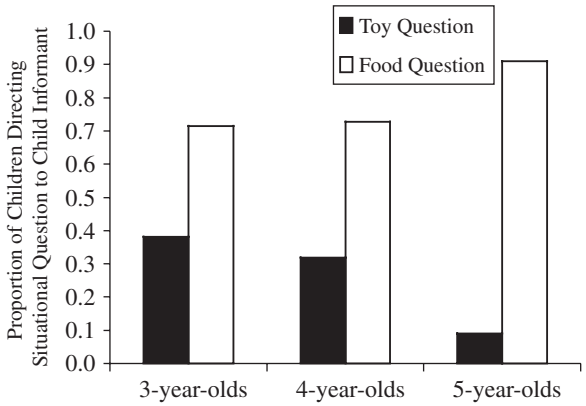

Figure 2. Proportion of children directing toy and food questions to the child informant on situational trials.

before, and the other on which the toy was described as the adult's favourite and one the child had never seen before. As the figure shows, the pattern of responses on these trials was the opposite of their responses on the status trials: Children were more likely to direct the food question than the toy question to the child informant. Importantly since these questions produced the opposite response type as the first 12, the pattern here suggests that participants were paying attention to the wording of the questions rather than developing a simple response bias of, for example, responding 'kid' to every question with the word 'toy' in it.

On these situational trials, individual children could direct the food question to the child and the toy question to the adult (the predicted pattern), the toy question to the child, and the food question to the adult (the opposite pattern), or both questions to either the adult or the child. In the 3-year-old sample, 12 children (57%) showed the predicted pattern, 5 (24%) showed the opposite, and 4 (19%) directed both questions to either the adult or child; in the 4-year-old sample, the corresponding numbers were 14 (64%), 5 (23%), and 3 (13%); and in the 5-year-old sample, the corresponding numbers were 20 (91%), 2 (9%), and 0. The distribution of responses did not differ as a function of age, χ^2 $(4, N = 65) = 7.43$, ns. At each age, more children directed the toy question to the adult and the food question to the child than would be predicted by chance (two-tailed Binomial Tests, chance probability[2] $= 0.25$, p's < 0.01).

Overall Response Patterns

Finally, we were interested in how many children both directed more toy than food questions to the child on the status trials *and* directed the food but not the toy question to the child on the situational trials. Among 3-year olds, 9 of 21 (43%) did so; among 4-year olds, 13 of 22 (59%) did so; and among 5-year olds, 18 of 22 (82%) did so. As these data suggest, more 5-year olds than 3-year olds responded with the complete predicted pattern, χ^2 $(1, N = 43) = 6.98$, $p < 0.01$. We will return to a possible explanation for this age difference in the Discussion. The important point is that at all ages, more children than would be expected by chance responded in a manner consistent with the predicted pattern (two-tailed Binomial Tests, chance probability[3] $= 0.11$, p's < 0.001).

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DISCUSSION

Conventional wisdom and most previous research suggest that preschoolers expect adults to be more knowledgeable than children (e.g. Taylor *et al*., 1991; Wimmer *et al*., 1988). The handful of empirical studies that have shown otherwise have focused on specific circumstances that undermine the credibility of specific adults (e.g. Jaswal & Neely, 2006; Lampinen and Smith, 1995). The present study is unique in that it shows that even without any experience that would lead them to doubt the credibility of a given adult, children do seem to think that there are some kinds of information for which a peer could be a better informant than an adult. Three- to five-year olds directed most questions about toys to a child informant and most questions about the nutritional value of foods to an adult informant.

There are at least two reasons why children might have directed the questions about toys to the child informant and the questions about foods to the adult informant. First, they may have had general expectations about who would make a better informant for each of these domains of information. For example, given that children are generally more interested in and have more experience with toys, they may have expected that children would be more knowledgeable than adults about anything having to do with toys. Indeed, a few children in our study spontaneously offered this type of justification for their choices, explaining, for example, that they had selected the child informant for a toy question because 'kids always know about toys'.

Children's judgements may also have been influenced by the type of information about toys or foods that they were seeking. We deliberately chose to pose questions about toys whose answers could be learned through observation or manipulation (i.e. how and where a toy was to be played with). Additionally, we deliberately chose to pose questions about foods whose answers had to be learned from another person (i.e. whether and why a food was good for you). Our choice of these particular types of questions may very well have been what led children to select different informants: It is possible that children recognize that adults are more likely than children to possess knowledge that must be acquired through testimony, regardless of the domain. For example, if the questions about a toy had concerned how much the toy cost or where it was made, children might have directed it to the adult informant.

Our interest in the present study was in whether there were *any* circumstances under which children would seek out information from a child rather than an adult when they had no reason to doubt the credibility of that adult. Our study was not designed to investigate the means by which they did so, and so we leave this important question for future research.

We did not find any age differences in performance on the status trials: 3-year olds were as likely as 4- and 5-year olds to direct the food questions to the adult and the toy questions to the child. This raises the interesting question of whether there is any age at which children would demonstrate an adult bias—preferring the adult informant to the peer regardless of the type of information being sought or offered. Although we are not aware of any studies that directly address this question, two studies from the imitation literature suggest that even infants recognize that peers can be very good informants. Hanna and Meltzoff (1993) found that 14- to 18-month olds imitated a peer just as readily as an adult, and Ryalls, Gul, and Ryalls (2000) found that they were actually *more* likely to imitate a peer than an adult.

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It is interesting to consider our findings in the context of theory of mind development. Although 3-year olds may have difficulty understanding false beliefs (e.g. Wellman, Cross, & Watson, 2001), and even 4- and 5-year olds have difficulty understanding the active, interpretive nature of the mind (e.g. Carpendale & Chandler, 1996), our results point to a fundamental principle of epistemology they do seem to grasp: Consistent with results from Lutz and Keil (2002), we have shown that even 3-year olds have a basic understanding that expertise is relative. Some sources may be more knowledgeable than others, depending on the domain or type of information being considered.

Although our primary focus was on preschoolers' expectations about an informant based on his or her age, the two situational questions included in the present study show that preschoolers appreciate that situational variables can also influence who would be the best informant. Previous research has shown that, all other things being equal, children recognize that one has to have at least some experience with an item in order to know about it (e.g. Birch & Bloom, 2002; Diesendruck & Markson, 2001; O'Neill, 1996). For example, Birch and Bloom (2002) found that children as young as 2 years of age recognized that an experimenter was more likely to know the proper name of a stuffed animal with which she was familiar rather than the name of one she had never seen before. Results from our final two situational trials were consistent with this 'familiarity principle:' preschoolers preferred to direct their questions about a food or toy to an informant who claimed it as a favourite rather than one who had never seen it before. Moreover, children adhered to this familiarity principle even though it meant over-riding their expectation that adults are good sources of information about the type of food questions we asked and children are good sources of information about the type of toy questions we asked.

When the status and situational questions are considered separately, 3-, 4-, and 5-year olds responded similarly: On status trials, they directed the toy questions to the child and the food questions to the adult; on situational questions, this preference reversed. When considering patterns in individual performance, however, fewer 3-year olds than 5-year olds both directed more toy than food questions to the child on the status trials *and* directed the food but not the toy question to the child on the situational trials. Indeed, about one-third of the 3-year olds who responded to the status questions by favouring the child for the toy questions and the adult for the food questions simply maintained this preference on the situational questions. We suspect that 3-year olds may have found it more difficult than the older children to switch the response pattern that they had developed over the course of the preceding status questions (i.e. food questions to adult; toy questions to child). Indeed, the large literature on inhibitory control shows that 3-year olds have difficulty inhibiting responses that have developed over the course of a task. For example, Zelazo, Frye, and Rapus (1996) showed that when asked to sort cards according to one rule (e.g. by colour), 3-year olds had trouble later sorting the cards according to a different rule (e.g. by shape).

In summary, our results suggest that preschoolers recognize that adults are not necessarily the best informants for every type of information. These results add to a small, but growing body of research suggesting that preschoolers recognize that an individual's background plays an important role in what she or he is likely to know (for a review, see Miller, 2000). Just as they expect a doctor and a car mechanic to have different pockets of expertise simply by virtue of being a doctor or car mechanic (Lutz & Keil, 2002), they also expect an adult and child to have different pockets of expertise simply by virtue of being an adult or child.

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Notes

1. We calculated chance in the following way: on the status trials, children could direct between 0 and 6 food questions to the adult and between 0 and 6 toy questions to the adult, meaning that there were a total of 49 possible combinations of responses to these two question types (i.e., {0 0; 0 1; 0 2; . . .; 6 6}). Twenty-one of these 49 combinations reflect more food than toy questions being directed to the adult informant (i.e., {1 0; 2 0; 2 1; . . .; 6 5}). Thus, by chance, the probability of responding with the predicted pattern on the status trials was 21/49, or 0.43.
2. On the situational trials, children could direct the food question to the adult or child, and the toy question to the adult or child. Thus, there were four possible combinations of responses, and just one in the predicted pattern (food to child and toy to adult). The probability of responding with the predicted pattern on the situational trials was therefore 1/4 or 0.25.
3. The probability of responding in the predicted pattern on both the status and situational trials is 0.429 (see footnote 1) *0.25 (see footnote 2) = 0.11.

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REFERENCES

Bar-Tal, D., Raviv, A., Raviv, A., & Brosch, M. E. (1991). Perception of epistemic authority and attribution for its choice as a function of knowledge area and age. *European Journal of Social Psychology, 21,* 477–792.

Birch, S. A. J., & Bloom, P. (2002). Preschoolers are sensitive to the speaker's knowledge when learning proper names. *Child Development*, *73*, 434–444.

Carpendale, J. I., & Chandler, M. J. (1996). On the distinction between false belief understanding and subscribing to an interpretive theory of mind. *Child Development*, *67*, 1686–1706.

Ceci, S. J., Ross, D. F., & Toglia, M. P. (1987). Suggestibility of children's memory: Psycholegal implications. *Journal of Experimental Psychology, 116*, 38–49.

Danovitch, J. H., & Keil, F. C. (2004). Should you ask a fisherman or a biologist? Developmental shifts in ways of clustering knowledge. *Child Development*, *75*, 918–931.

Danovitch, J. H., & Keil, F. C. (2007). Choosing between hearts and minds: Children's understanding of moral advisors. *Cognitive Development*, *22*, 110–123.

Diesendruck, G., & Markson, L. (2001). Children's avoidance of lexical overlap: A pragmatic account. *Developmental Psychology, 37*, 630–641.

Hanna, E. & Meltzoff, A. N. (1993). Peer imitation by toddlers in laboratory, home, and day-care contexts: Implications for social learning and memory. *Developmental Psychology, 29*, 701–710.

Jaswal, V. K., & Neely, L. A. (2006). Adults don't always know best: Preschoolers use past reliability over age when learning new words. *Psychological Science*, *17*, 757–758.

Keil, F. C. (2006). Explanation and understanding. *Annual Review of Psychology, 57*, 227–254.

Koenig, M. A., Clement, F., & Harris, P. L. (2004). Trust in testimony: Children's use of true and false statements. *Psychological Science*, *15*, 694–698.

DOI: 10.1002/icd

Lampinen, J. M., & Smith, V. L. (1995). The incredible (and sometimes incredulous) child witness: Child eyewitness' sensitivity to source credibility cues. *Journal of Applied Psychology, 80*, 621–627.
Lutz, D. J., & Keil, F. C. (2002). Early understanding of the division of cognitive labor. *Child Development*, *73*, 1073–1084.
Miller, S. A. (2000). Children's understanding of preexisting differences in knowledge and belief. *Developmental Review, 20*, 227–282.
O'Neill, D. (1996). Two-year-old children's sensitivity to a parent's knowledge state when making requests. *Child Development*, *67*, 659–677.
Ryalls, B. O., Gul, R. E., & Ryalls, K. R. (2000). Infant imitation of peer and adult models: Evidence for a peer model advantage. *Merril-Palmer Quarterly, 46*, 188–202.
Taylor, M., Cartwright, B. S., & Bowden, T. (1991). Perspective taking and theory of mind: Do children predict interpretive diversity as a function of differences in observers' knowledge? *Child Development*, *62*, 1334–1351.
Wellman, H. M., Cross, D., & Watson, J. (2001). Meta-analysis of theory-of-mind development: The truth about false belief. *Child Development*, *72*, 655–684.
Wimmer, H., Hogrefe, G. J., & Perner, J. (1988). Children's understanding of informational access as source knowledge. *Child Development*, *59*, 386–396.
Young, J. W., & Ferguson, L. R. (1979). Developmental changes through adolescence in the spontaneous nomination of reference groups as a function of decision content. *Journal of Youth and Adolescence*, *8*, 239–252.
Zelazo, P. D., Frye, D., & Rapus, T. (1996). An age-related dissociation between knowing rules and using them. *Cognitive Development*, *11*, 37–63.

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