

Short Report

Adults Don't Always Know Best 

Preschoolers Use Past Reliability Over Age When Learning New Words

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 Children learn much of what they know—from words to their birth dates to the fact that the earth is round—from what other people tell them. But some people are better informants than others. One way children can estimate the credibility of a speaker is by evaluating how reliable that person has been in the past. Even preschoolers prefer learning new words from an adult who has previously labeled objects correctly rather than one who has labeled objects incorrectly (Koenig, Clement, & Harris, 2004). Children may also make predictions about a speaker on the basis of that person's membership in a particular group. For example, 4-year-olds expect that an unfamiliar adult, but not necessarily an unfamiliar child, knows the meaning of the word *hypochondriac* (Taylor, Cartwright, & Bowden, 1991). Which of these two cues to a speaker's credibility—reliability or age—do 3- and 4-year-old children find more compelling?

METHOD

 Fifty-eight 3- and 4-year-old children (range = 3 years 0 months to 4 years 11 months; 28 males) watched a short movie featuring two actors: a young girl (introduced as a “girl, just your age”) and a woman (introduced as a “grown-up, just like your mom”). The movie consisted of a training phase and a testing phase.

In the training phase, children had the opportunity to learn whether one, both, or neither actor was a reliable source. The actors were presented with four familiar objects (shoe, airplane, cup, and telephone), one at a time, and they were asked what each object was called. In the *both-reliable* condition ($n = 14$; mean age = 4 years 2 months), the child actor and the adult actor provided accurate, but different, labels (e.g., a shoe was called a “shoe” and a “sneaker”). In the *reliable-adult* and the *reliable-child* conditions ($n_s = 14$ and 15 , respectively; mean age in each = 3 years 11 months), either the adult or the child actor provided

accurate labels; the other actor provided inaccurate ones (e.g., the shoe was called a “shoe” and a “glass”). Finally, in the *both-unreliable* condition ($n = 15$; mean age = 4 years 1 month), the actors provided inaccurate and different labels (e.g., the shoe was called a “glass” and a “telephone”). Approximately half the children in each condition heard the adult actor give the label first for the first and fourth objects; the other half heard her give the label first for the second and third objects.

After the two actors labeled a given object, the experimenter paused the movie, repeated the two labels in the order they had been given, and asked the participant what the object was called, whether it could also be called by the other name, and whether either actor had “said something wrong.” Corrective feedback was provided if necessary.

In the testing phase, the movie was the same in all four conditions. The actors were presented with four unfamiliar objects (paint roller, dish scrubber, strainer, and book light), one at a time, and they were asked what each one was called. For each object, the adult actor gave one novel label (e.g., “blicket”) and the child actor gave a different novel label (e.g., “wug”). The experimenter paused the movie, repeated the two labels, and asked the participant what the object was called. Only neutral feedback was given.

RESULTS

 As Figure 1 shows, children in the both-reliable and reliable-adult conditions clearly preferred the novel labels given by the adult actor, endorsing her labels more frequently than would be expected by chance, $t(13) = 2.22, p_{rep} = .92, d = 0.59$, and $t(13) = 5.09, p_{rep} = .99, d = 1.36$.¹ In contrast, children in the reliable-child condition had the opposite preference: When the child actor had been more reliable than the adult, participants 

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¹Some researchers have found that 4-year-olds are better able to monitor relative accuracy than 3-year-olds are (Koenig & Harris, 2005). However, we found no effects or interactions involving the participants' age or sex. Results are collapsed across these variables.

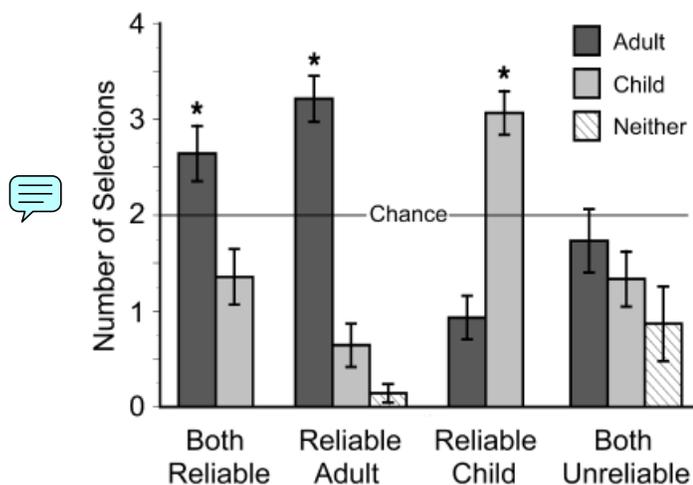


Fig. 1. Average number of times (out of four) that children selected the novel label given by the adult speaker, the child speaker, or neither, in each condition. Error bars show standard errors of the means. Asterisks indicate selection of an informant's label more often than expected by chance ($p < .05$, $p_{rep} > .92$, by t test).

favored the novel labels given by the child actor, $t(14) = 4.68$, $p_{rep} = .99$, $d = 1.21$. In the both-unreliable condition, children were ambivalent, $t(14) < 1$, with 4 of the 15 participants (27%) consistently (three or more times out of four) insisting that neither actor's label was appropriate.

An analysis of variance on the number of times children selected the adult actor's novel label revealed a significant effect of condition, $F(3, 54) = 13.31$, $p_{rep} = .99$, $\eta^2 = .43$. Children in the both-reliable and reliable-adult conditions selected the adult actor's label more often than those in the reliable-child condition, and children in the reliable-adult condition selected the adult actor's label more often than those in the both-unreliable condition (Tukey's HSD, $p < .05$).

DISCUSSION

Preschoolers experience many more situations in which an adult knows more than a child than situations in which the reverse is true. Indeed, they may see adults as omniscient (e.g., Wimmer, Hogrefe, & Perner, 1988). They are generally willing to accept what an adult says, sometimes even when it contradicts their own experience. For example, preschoolers who witness an event and then hear an adult provide misleading information about it will later often report the misleading information themselves. Interestingly, when the same misleading information comes from a child rather than an adult, it is much less

likely to be reported (Ceci, Ross, & Toglia, 1987; Lampinen & Smith, 1995).

Given this normal deference to adults, our results are especially noteworthy. When 3- and 4-year-olds had no reason to doubt an adult's credibility, they were more receptive to the novel labels she provided than to those provided by a peer. This result is consistent with the research just described. However, when the adult had mislabeled just four objects, children no longer considered her to be the better informant. Indeed, when the peer had been more reliable than the adult, children actually favored the labels that the peer provided.

By default, preschoolers assume that adults are better sources of information about what things are called than children are. Our study shows that they need surprisingly little counterevidence to override this assumption. How long-lasting this effect would be and whether it would generalize to a domain other than word learning remain intriguing questions.

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