A simple gesture can be incorporated into a child's memory so quickly that it will cause the child to give a false answer to a question accompanied by that gesture. This new finding suggests that parents, social workers, psychologists, lawyers and investigators should be careful with their hands as well as their words when trying to extract the truth from a child.

Gestures can be as informative (and misleading) as speech, but hand motions are so ubiquitous we rarely notice when we are using them, researchers say. The new study suggests we should pay more attention, especially when talking to a child.

While the recollections of both adults and children are susceptible to suggestion, the memories of children are known to be particularly malleable, said lead researcher Sara Broaders of Northwestern University. Kids are used to looking to adults to interpret and recount events for them and can be misled even if unintentionally.

Previous research, for example, has shown that detail-loaded questions often prompt false answers; when asked, say, "Did you drink juice at the picnic?," the child is likely to say "yes," even if no juice had been available.

It's not that the child is consciously lying. Rather, the detail is quickly incorporated into his or her memory.

To circumvent this problem, social workers, investigators and lawyers have long been advised to ask children only open-ended questions, such as "What did you have at the picnic?" But the new study, published last month in the journal Psychological Science, found that an open-ended question paired with a gesture (briefly miming a juice box) is treated like a detailed question. That is, children become likely to answer falsely.

And it isn't just a few kids: 77 percent of children gave at least one piece of false information when a detail was suggested by a commonplace gesture.

If this seems obvious in hindsight, consider this: Much of our legal system depends on written transcripts that record only vocalized conversation, and do not capture silent forms of communication.

Mimicking child witness testimony
Thirty-nine children, aged 5 and 6, witnessed identical performances by a musician. They were then questioned about the performance through an interview process that approximated the experience of a child trial witness. Specifically, five one-on-one interviews were conducted over a 10- to 12-week period. The kids were asked detailed and open-ended questions, some of which were paired with gestures.

The researchers found that the kids were just as likely to give false answers to specific questions, like "did he wear a hat," as they were to open-ended questions that included gestures, such as "what else was he wearing" asked as the interviewer patted his head. (The musician did not wear a hat.)

"And pieces of information they had only gotten in gesture, they were repeating (unprompted) in the third and fourth interview," Broaders told LiveScience.

Early questioning practices may have a dramatic impact not only on the child's eventual testimony, but also on his or her actual memory of the event. And in real-life legal matters, children are usually first questioned by parents or other untrained individuals who may unwittingly use detailed questions or gestures long before they are interviewed by psychologists or members of the legal system, the researchers say.

Erroneous details suggested in a first interview can be "remembered" by a child even months later, said senior study researcher Susan Goldin-Meadow of the University of Chicago.

Silent speech

Even trained interviewers trying particularly hard not to lead their witness may end up doing just that.

Trying not to mention something one suspects is true makes unconscious gestures more likely, other studies have shown. "It is a means of leaking information they are trying not to convey," Broaders said.

Gestures may also become more prevalent when "talking with non-fluent language users (such as little kids)," Broaders said, as hand movements can impart meaning to unfamiliar words and phrases. "It certainly seems reasonable that adults would gesture more with children, especially really little children."

"And if they are gesturing, they may be leading the child in ways they don't realize," she added.

While many jurisdictions videotape child interviews, they often focus solely on the child's face. Gestures made by the questioner can therefore go missed. Videotaping both conversation partners, head-to-foot, may help prevent misleading testimony, Broaders said.

In general, Broaders advises parents and other adults to "try to be aware of your hands when questioning a child about an event. Otherwise, you might be getting answers that don't reflect what actually happened."

Gestures, even unintended ones, she emphasized, "can lead to answers that are very specific but not true."

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