

Who's in the Know? To a Preschooler, the Person Doing the Pointing

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If you want a preschooler to get the point, point. That's a lesson that can be drawn from a new study in [Psychological Science](#), a journal published by the [Association for Psychological Science](#). As part of their investigation of how small children know what other people know, the authors, Carolyn Palmquist and Vikram K. Jaswal of the University of Virginia, found they were able to mislead preschoolers with the simple introduction of a pointing gesture. "Children were willing to attribute knowledge to a person solely based on the gesture they used to convey the information," says Palmquist. "They have built up such a strong belief in the knowledge that comes along with pointing that it trumps everything else, including what they see with their eyes."

The authors showed 48 preschoolers, half of them boys and half girls, a videotape of two women, four cups, and a ball. In each of four sequences, one woman said she was going to hide the ball under one of the cups. The other woman covered her eyes and turned to the wall. The "hider" placed a barrier in front of the cups, so the children could see she was hiding the ball, but not which cup she hid it under. The barrier was removed, the other woman turned around. Then, each sequence took one of three forms. In the "baseline" condition, both women sat with their hands in their laps. In another condition, each grasped a different cup. And in another, each pointed at a different cup. The children were asked: "Which woman knows where the ball is?" In two of the trials, one woman was the hider; in the other two, the other was.

When both grasped the cup or when neither touched a cup, the children gave the correct answer about three times out of four. Grasping was not a meaningful gesture to the children, the authors guessed, or they may have associated grasping with searching for the ball. When both women pointed, however, the children chose the right person only about half the time—statistically, by chance.

To make sure the preschoolers hadn't ignored the question and inferred they were being asked which cup they would look under, the experimenters showed eight other children the pointing sequences and asked: "Which woman hid the ball?" In this case, the children got it right three out of four times. So the first group knew who hid the ball; they just thought the other woman must also have had some intelligence about the ball's whereabouts.

"From an early age, when children see pointing, they understand it as an important gesture used in contexts of teaching and learning," Palmquist explains. "Generally people point because they have good reason to do it." As a species humans are "uniquely inclined toward cooperative communication," she notes. "This finding fits into that framework. The children are already expecting that people will be helpful and knowledgeable, especially since they're using these cues."