

## Two sides of the same coin: Speech and gesture mutually interact to enhance comprehension

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Your mother may have taught you that it's rude to point, but according to new research in *Psychological Science*, a journal of the Association for Psychological Science, gesturing may actually help improve communication.

Psychological scientist Spencer Kelly from Colgate University, along with Asli Özyürek and Eric Maris from Radboud University Nijmegen (The Netherlands) were interested in the interaction between <u>speech</u> and gesturing and how important this relationship is for language. In this study, volunteers watched brief videos of common actions (e.g., someone chopping vegetables, washing dishes) followed by a one-second video of a spoken word and a <u>gesture</u>. In some of the trials (congruent trials), the speech and gestures were related (e.g., "chop," chopping gesture), while during other trials (incongruent trials), what was said did not match the gesture (e.g., "chop," twisting gesture). The volunteers had to indicate whether the speech and gesture were related to the initial video they watched.

The results revealed that the volunteers performed better during congruent trials than incongruent trials — they were faster and more accurate when the gesture matched the spoken word. Furthermore, these results were replicated when the volunteers were told to pay attention only to the spoken word and not the gesture. Taken together, these findings suggest that when gesture and speech convey the same



information, they are easier to understand than when they convey different information. In addition, these results indicate that gesture and speech form an integrated system that helps us in <u>language</u> <u>comprehension</u>.

The researchers note that "these results have implications for everyday communicative situations, such as in educational contexts (both teachers and students), persuasive messages (political speeches, advertisements), and situations of urgency (first aid, cock pit conversations)." They suggest that the best way for speakers to get their message across is to "coordinate what they say with their words with what they do with their hands." In other words, the authors conclude, "If you really want to make your point clear and readily understood, let your words and hands do the talking."

**More information:** "Two Sides of the Same Coin: Speech and Gesture Mutually Interact to Enhance Comprehension," *Psychological Science*.

## Provided by Association for Psychological Science

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