

Limited gestures may not be definitive in diagnosing autism

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Limited gesturing is often a key part of establishing a diagnosis of autism, but new research indicates that certain types of gestures may not necessarily be produced less frequently than others.

Autism spectrum disorder is a complex neurodevelopmental condition characterized by differences in social-communication skills, and repetitive and/or restricted behaviors and interests.

Autistic individuals are considered to gesture less frequently than neurotypical individuals, so this is a key criterion in the diagnostic assessment for autism.

A systematic review and [meta-analysis published](#) in the *Psychological Bulletin* by Macquarie University Master of Clinical Neuropsychology graduate Nicola McKern, Griffith University autism researcher, Dr. Nicole Dargue, and Macquarie University Professor of Psychology, Professor Naomi Sweller looked at 31 previous studies comparing the frequency of [gestures](#) between autistic and neurotypical individuals.

The article is titled "Comparing gesture frequency between autistic and neurotypical individuals: A [systematic review](#) and meta-analysis."

Professor Sweller says gestures include movements of the head, arms and hands, and play an important role in social communication from [early childhood](#) onwards.

"They might range from simply pointing at something you want to more culturally specific gestures like a thumbs up to show something is good or nodding to agree," she says.

"Because [autistic people](#) have been thought to gesture less, the criteria for diagnosing autism are weighted in such a way that if an individual gestures less during the assessment, they are more likely to be diagnosed with autism.

"However, there has been disagreement as to whether this is true. Some studies have shown that autistic people gesture less than neurotypical

people, while others have shown little difference."

Three main types of gestures were explored in the study: deictic, emblematic, and iconic.

Deictic gestures are simple movements like pointing that children learn to use very early in life, and emblematic gestures convey meaning on their own without the requirement for words. Iconic gestures are the sort of descriptive movements you might make to indicate the fish was "this big" or the person was "this tall."

While the study found that [autistic individuals](#) produced fewer total, deictic, and emblematic gestures than neurotypical individuals, reduced frequency of iconic gestures in [autism](#) was less apparent. In fact, in the case of iconic gestures, some autistic individuals produced them at a similar rate to, or even more frequently than, neurotypical individuals.

"With so much variability across the autistic community, the extent to which autistic individuals gesture varies," Professor Sweller says.

"With the weighting in diagnosis given to gesture production, it's important for clinicians to remember that just because someone produces gestures during an assessment, it doesn't necessarily mean they're not autistic. Despite the prevailing belief that autistic individuals tend to use fewer gestures, there can be exceptions."

More information: Nicola McKern et al, Comparing gesture frequency between autistic and neurotypical individuals: A systematic review and meta-analysis, *Psychological Bulletin* (2023). [DOI: 10.1037/bul0000408](https://doi.org/10.1037/bul0000408)

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