

New theory suggests autism may not be tied to mindblindness

2 September 2020



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Tracking the extent to which other people think differently from yourself appears to be more relevant than understanding someone else's thoughts per se. Neuroscientists at Ghent University and the University of New South Wales (Sydney) came to this conclusion.

Through a <u>systematic review</u> and critical analysis of more than 50 neurological imaging studies, they found that one of the main areas of the brain we use to understand others is active in detecting differences between what you think and what others think. In the past, this brain area was believed to be mainly active in understanding what others think. They call their new theory of human social cognition "relational mentalizing."

Dr. Eliane Deschrijver says, "No two people ever see or experience the same events in exactly the same light. In fact, in any conversation, minor differences in thinking happen all the time:

Someone may be telling you about a situation with their boss, while you were actually thinking of changing the topic to your cat. If one isn't on the same page with another person, the brain may

need to process this, and then determine whether to rephrase one's own thoughts or focus onthe other's. It can crucially determine the flow of any social interaction."

Autism

The brain region that according to the researchers is responsible for detecting differences between your understanding of others' thoughts and what you think yourself is called the temporoparietal junction. This brain region is often less active in people on the autism spectrum.

After re-assessing other findings from 35 years of Theory of Mind research in autism, the researchers argued that the <u>brain</u> in people on the spectrum may be able to grasp what others think, but then may have a harder time processing the degree to which others think differently from themselves.

Dr. Deschrijver says, "If they notice another person trying to steer away the conversation towards an own interest, for instance, individuals on the spectrum may not entirely process a mismatch in thinking as a cue to stop talking. This can lead them to overshare their own thoughts. The opposite may happen, too: Understanding the other's different thoughts may keep an individual on the spectrum from verbalizing their own thoughts, even if that were socially expected. Differences in engaging in back-and-forth conversation are thought to lie at the heart of the autism spectrum."

Out with Theory of Mind?

The new theory also changes our understanding of complex social interactions such as lie detection, moral judgments, and the understanding of sarcasm and humor. Recognizing that a person is sarcastic, for instance, when they call the weather "beautiful!" while it is raining, may well depend on detecting a mismatch between this person's statement and one's own understanding of the



world. If "mindreading" is less important than we thought, the "relational mentalizing" theory spawns many new research questions.

The article was published in Psychological Bulletin.

More information: Eliane Deschrijver et al. Reframing social cognition: Relational versus representational mentalizing., *Psychological Bulletin* (2020). DOI: 10.1037/bul0000302

Provided by Ghent University

APA citation: New theory suggests autism may not be tied to mindblindness (2020, September 2) retrieved 15 May 2021 from https://medicalxpress.com/news/2020-09-theory-autism-tied-mindblindness.html

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