

AUTISM AND METACOGNITION

ABSTRACT

The relationship between metacognition and mindreading is a hot topic in cognitive science. Metacognition, being the awareness of one's own mental states, allows us to have access to our thoughts. Whereas mindreading is the ability to interpret the mental states of others. Discerning this relationship by a one system, two modes of access view, shows one function can be impaired while the other remains functional. Advantages to this view is the finding that people on the autism spectrum have unimpaired metacognition. Through numerous experiments, findings suggest that although people on the autism spectrum may have difficulty interpreting others, they can use feedback and provide accurate judgements of their own confidence. The finding that a theory of mind remains unimpaired in people with autism is significant. Understanding the way autistic-like traits interfere with metacognition and mindreading abilities broadens alternatives within management and therapy to people on the autism spectrum.

THESIS

A theory of mind is not impaired in people on the autism spectrum but only the capacity to mind-read onto others is impaired.

Mindreading versus Metacognition



Based on this picture, how do you think he's feeling?

How confident are you on a scale of 1–5?

METHODOLOGY

PHIL 4082
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A) RMIE and metacognitive monitoring

Participants were shown a picture of a human face and had to infer how the person was feeling (happy, sad, etc) accompanied with a confidence judgement (metacognitive monitoring).

B) Interoceptive awareness

Participants inferred cues in speech (like sarcasm). Researchers wanted to see if the awareness of one's own body (interoception) correlated with accurate judgments of speech cues (affective prosody).

C) Academic competencies

Participants answered general knowledge questions accompanied by a judgement of confidence. Researchers provided feedback on incorrect trials.



FINDINGS AND DISCUSSION

The number of autistic-like traits negatively correlates with mindreading performance. However, metacognitive abilities remain intact. This suggests that people with autism can provide accurate judgments of confidence and understand their mental life. People with autism can also correct their mistakes using feedback. The findings show that metacognition and mindreading employ the same system but have different modes of access. The significance of this is that damage to one part of the system does not disrupt the system entirely.