

SCHIZOPHRENIA Factsheet

What is social cognition?

Social cognition describes the ability to understand the actions and intentions of other people. Aspects of social cognition may be altered in people with schizophrenia, including processes such as theory of mind, social perception, and emotion processing. Theory of mind refers to the ability to infer the mental states of other people. Social perception is an awareness of social cues and norms that dictate social interactions. Emotion processing is the ability to perceive emotional cues. Empathy involves showing concern for others, understanding their perspective, experiencing distress when exposed to others' negative events, and having the ability to place oneself into fictional situations and empathically relate to the characters ('fantasy'). Social cognition is crucial for effective communication, and may relate to social competence and predict work functioning.

What is the evidence for social cognition?

Moderate to high quality evidence finds large effects of impaired social perception, emotion perception, and emotion processing, and medium-sized effects of impaired social knowledge, biological motion processing, and empathetic abilities in people with schizophrenia. In general, those with predominately negative symptoms show poorer social cognition than those with predominately positive symptoms. Facial emotion perception can be adversely affected by more severe negative symptoms, and non-emotional recognition may be adversely affected by more severe positive symptoms. High quality evidence shows a very small improvement in facial affect processing with antipsychotic medication, particularly second-generation antipsychotics.

High quality evidence shows a large theory of mind impairment in people with schizophrenia across multiple tasks, and regardless of sex or age. People with disorganised symptoms were particularly impaired on theory of mind tasks. Moderate quality evidence finds patients in an acute phase of the illness performed worse on theory of mind tasks than outpatients or patients soon to be discharged from hospital. Overall, poorer neurocognition and insight was related to poorer theory of mind.

High quality evidence finds a small to medium-sized theory of mind impairment in relatives of people with schizophrenia, with lower education contributing to lower theory of mind scores. Moderate to high quality evidence also finds medium-sized theory of mind and overall social cognition impairments in people at ultrahigh risk of psychosis.

Moderate to high quality evidence finds associations between better theory of mind and emotion processing, and better social functioning, community functioning and insight. There were also associations between poorer facial recognition, emotion processing, emotion perception, social perception, and theory of mind, and poorer performance on cognitive measures and more severe symptoms.

Moderate to high quality evidence finds a medium-sized effect of poorer social cognition in people with schizophrenia than in people with bipolar disorder on theory of mind and negative facial emotion recognition tasks, particularly in males. There were no differences on positive (happy) facial emotion recognition tasks. There were also no differences between people with schizophrenia and people with autism on theory of mind and emotion processing tasks.

For more information see the technical table

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NeuRA (Neuroscience Research Australia) is one of the largest independent medical and clinical research institutes in Australia and an international leader in neurological research.

Diseases of the brain and nervous system pose the greatest health, economic and social burden of any disease group because they are chronic, debilitating and have no known cures.

Medical research is the cornerstone of efforts to advance the health and wellbeing of families and the community. Our dedicated scientists are focussed on transforming their research into significant and practical benefits for all patients.

While we hope you find this information useful, it is always important to discuss any questions about schizophrenia or its treatment with your doctor or other health care provider.

NeuRA (Neuroscience Research Australia) Foundation **T** 1300 888 019 **F** +61 2 9399 1082 ABN 57 008 429 961

Margarete Ainsworth Building Barker Street, Randwick NSW 2031 PO Box 1165 Randwick Sydney NSW 2031 Australia