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SCHIZOPHRENIA Factsheet

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What is attention?

Selective attention is the ability to focus on relevant stimuli and ignore irrelevant stimuli. Sustained attention is the ability to maintain a consistent focus. Several tasks have been developed to assess attention performance. Examples include the Continuous Performance Test, which uses both visual and auditory stimuli and requires participants to respond to targets and ignore distractors. Other examples include the Trail Making Test, which requires participants to connect, in order, letters and/or numbers as quickly as possible, and the Wisconsin Card Sorting Test that tests the ability to display flexibility during changing schedules. The Stroop Colour Word Test presents the name of a colour printed in an ink congruent to the colour name (e.g. blue), or incongruent to the colour name (e.g. blue), and participants are asked to either read the word or name the ink colour. Attention tasks may also measure other cognitive constructs, such as processing speed and memory.

What is the evidence for attention?

Moderate to high quality evidence shows medium to large effects of poorer performance on various attention and vigilance tasks in people with schizophrenia compared to people without schizophrenia. There are small to medium-sized associations between poorer attention and more severe symptoms, poorer community functioning, and poorer social skills. People taking olanzapine or quetiapine showed medium to large improvements on attention tasks after treatment. People taking haloperidol showed small improvements after treatment, and people taking clozapine or risperidone showed no improvement after treatment.

High quality evidence finds people at clinical high risk of psychosis and people at familial high risk for psychosis are similarly impaired on attention tasks. Moderate to high quality evidence shows a medium-sized effect of better attention in people at clinical high-risk than people with first-episode psychosis. Those at risk who converted to psychosis were more impaired on attention tasks than those at risk who did not convert to psychosis.

Compared to people with bipolar disorder, moderate to high quality evidence shows people with schizophrenia have slightly poorer performance on attention tasks. There was also poorer performance on attention tasks in people with schizophrenia who were herpes simplex virus positive or who had metabolic syndrome than in people with schizophrenia who were herpes simplex virus negative or who did not have metabolic syndrome. There was a small effect of greater impairment in attention in smokers vs. non-smokers with schizophrenia, however people with schizophrenia and a substance use disorder performed better on attention tasks than people with schizophrenia and no substance use disorder.

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.

HOW YOUR SUPPORT HELPS

We are able to make significant advances due to the generosity of countless people. Your donation allows us to continue to work towards transforming lives. For information on how you can support our research, phone **1300 888 019** or make a secure donation at neura.edu.au/donate.