

SCHIZOPHRENIA Factsheet

September 2020

What is memory?

Memory involves encoding, storage and retrieval of information. Short-term memory is the ability to remember information after several seconds or minutes and long-term memory is the ability to remember information over a longer duration. Working memory involves information being temporarily held as well as manipulated. Episodic memory is long-term memory for autobiographical events. Semantic memory involves memory for general facts, prospective memory involves memory for future actions, and retrospective memory is memory for past events.

What is the evidence for memory?

Compared to controls, moderate to high quality evidence finds medium to large effects of poorer short-term, long-term, working, episodic, prospective, and memory binding in people with schizophrenia

Compared to people with affective psychoses (e.g. bipolar I disorder), high quality evidence shows a medium-sized effect of poorer visual and verbal delayed memory, and verbal immediate memory, while moderate quality evidence finds poorer verbal working memory in people with schizophrenia.

Moderate to high quality evidence shows small to medium-sized associations between more severe negative and disorganised symptoms and poorer visual and verbal memory, with moderate quality evidence also suggesting a weak association with poorer executive working memory. There were small to medium-sized associations between poorer prospective memory and more severe general psychopathology, increased medication dose, longer duration of illness, increasing age, and lower education and IQ.

Moderate quality evidence suggests people taking olanzapine or risperidone show improvement in working memory after treatment, while people taking clozapine or quetiapine show no improvement. Moderate quality evidence suggests people taking olanzapine or risperidone show improvement on working memory with treatment, while people taking clozapine or quetiapine show no improvement. People taking olanzapine, clozapine, risperidone or haloperidol show improvement on delayed recall with treatment, while people taking quetiapine show no improvement.

Moderate to high quality evidence from long-term studies finds a small effect of poorer working memory in people at clinical high risk for psychosis who transitioned to psychosis compared to people at clinical high risk for psychosis who did not transition to psychosis.

For more information see the technical table



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/schizophrenia.