



SCHIZOPHRENIA Factsheet

September 2020

What are cognitive rehabilitation interventions?

Cognitive impairment is a significant problem for many people with schizophrenia, affecting domains such as executive functioning, attention, memory and social cognition. These deficits interfere considerably with day-to-day function. Cognitive remediation or rehabilitation interventions usually take the form of repetitive exercises with or without computers and sometimes augmented by group sessions, strategy coaching and homework exercises, which serve as training for cognitive processes as well as social skills and communication. Strategy learning focuses on providing alternative strategies to compensate for the observed difficulties with cognition; in contrast, rehearsal learning is aimed at restitution of lost skills. This type of intervention is specifically targeted to particular cognitive domains which are known to be deficient in people with schizophrenia, with the intention of compensating or improving functional outcome.

What is the evidence for cognitive rehabilitation interventions?

Moderate to high quality evidence finds a medium-sized benefit of computerised or non-computerised cognitive remediation over control interventions for improving attention, memory, processing speed, problem solving, cognitive flexibility and social functioning. There was also a small benefit for improving symptoms. Moderate to low quality evidence finds similar effectiveness for short (<15 sessions) and long duration of training (>15 sessions), and that strategy learning is more effective than rehearsal learning.

For computerised cognitive drill and practice training, moderate to high quality evidence finds small to medium-sized improvements in attention and positive symptoms when compared to mixed control conditions. There was also a small improvement in functioning. Moderate quality evidence finds medium-sized improvements in working memory and depressive symptoms, and small improvements in psychomotor speed. There were also small improvements in verbal fluency, verbal and visual learning and memory, and in negative and total symptoms.

For observation and imitation of social emotions interventions, moderate to high quality evidence finds a medium-sized benefit of improved theory of mind.

For further information see the technical table

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.



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.