



NeuRA

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BIPOLAR DISORDER Factsheet

October 2021

What is memory and how is it measured?

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. Semantic memory is memory for general facts, episodic memory is memory for personal events, prospective memory is memory for future actions, and retrospective memory is memory for past events. Most memory tasks assess retrospective memory by measuring recall and recognition.

What is the evidence regarding memory in people with bipolar disorder?

Moderate to high quality evidence shows medium-sized effects of poorer working and episodic memory in people with bipolar I disorder compared to controls. There were smaller effects of poorer working and episodic memory in people with bipolar II disorder compared to controls. Comparing people with bipolar I disorder directly with people with bipolar II disorder, small effects of poorer working memory and episodic memory in people with bipolar I disorder were found.

In people with either bipolar I or bipolar II disorder, there were medium-sized effects of poorer prospective and digit span memory compared to controls, with the effect for digit span backward being larger than for digit span forward.

In people with first-episode bipolar disorder and youth with bipolar disorder (aged 13 years), there were small to medium-sized effects of poorer verbal, visual and working memory compared to controls. Compared to people with first-episode schizophrenia, people with first-episode bipolar disorder showed better verbal and working memory, with no differences in visual memory.

In elderly people with bipolar disorder, moderate quality evidence found a medium-sized effect of poorer memory than in controls matched for age and years of education. Poor delayed recall was significant only during depression phases, while poor digit span was significant only during manic phases.

Compared to people with major depression, moderate quality evidence found a medium-sized effect of poorer verbal memory in people with bipolar disorder during euthymia but not during a depressive phase.

High quality evidence found small effects of poorer verbal and working memory with no differences in visual memory in people with bipolar disorder and a history of psychotic symptoms compared to people with bipolar disorder without a history of psychotic symptoms.

High quality evidence found small effects of poorer verbal and visual memory in young first-degree relatives of people with bipolar disorder (aged 10 to 25 years) compared to controls. Compared to first-degree relatives of people with schizophrenia, moderate to high quality evidence found first-degree relatives of people with bipolar disorder had small to medium-sized effects of better verbal and working memory, with no differences in visual memory.

High quality evidence suggests a small association between poorer memory and poorer general functioning.

Moderate quality evidence suggests no changes in memory over time (~4-5 years) in people with bipolar disorder.

For more information see the technical table



NeuRA

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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 bipolar disorder 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.

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