

# **BIPOLAR DISORDER Factsheet**

# **October 2021**

## What is processing speed?

Processing speed is the time it takes a person to do a mental task; the time between receiving and responding to a stimulus. Slow processing speed is not necessarily related to intelligence, but may interfere with other cognitive tasks such as planning, setting goals, making decisions, and paying attention.

## What is the evidence regarding processing speed in people with bipolar disorder?

Moderate to high quality evidence shows a large effect of slower processing speed in people with bipolar disorder compared to controls without bipolar disorder, and a medium-sized effect in first-episode patients There were no differences in processing speed between youth aged ~13 years with bipolar disorder and age and IQ-matched controls.

High quality evidence shows a small effect of slower processing speed in people with bipolar I disorder compared to people with bipolar II disorder, and slower processing speed in people with bipolar disorder with a history of psychotic symptoms compared to people with bipolar disorder with no history of psychotic symptoms. There was also slower processing speed in overweight people with bipolar disorder compared to normal weight people with bipolar disorder.

Compared to people with first-episode schizophrenia, moderate quality evidence shows a small effect of quicker processing speed in people with first-episode bipolar disorder. There were no differences in the comparison of people with major depression.

High quality evidence suggests a small effect of slower processing speed in firstdegree relatives of people with bipolar disorder compared to people with no family history of the disorder. Compared to first-degree relatives of people with schizophrenia, moderate to high quality evidence shows a small effect of quicker processing speed in first-relatives of people with bipolar disorder.

High quality evidence suggests a small association between slower processing speed and poorer general functioning in people with bipolar disorder, and moderate quality evidence shows no changes in processing speed over time (~3.5 years).

# Discover. Conquer. Cure.

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.

#### For more 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.

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