

## SCHIZOPHRENIA Factsheet

March 2022

#### What is rigidity?

Rigidity is an inability to change mental or behavioural sets when required. This resistance to change can be behavioural, cognitive or attitudinal. Rigidity requires two processes: set formation, where sets are learned patterns formed through repetition; and set perseveration, or continuation of the learned pattern. Rigidity may display itself as an inability to change beliefs or performance, or an inability to appreciate another person's point of view or emotions.

Rigidity may be measured by assessing perseveration on the Wisconsin Card Sorting Task (WCST). Participants are asked to match cards and are given feedback as to whether their choices are correct based on undisclosed category rules. Perseverative errors occur when a study participant continues matching cards according to a previous rule, despite having been given negative feedback. The Test of Behavioural Rigidity (TBR) requires participants to copy a paragraph containing random upper and lower-case letters and then copy the same paragraph replacing the lower-case letters with capitals and vice versa. Participants are also asked to think of synonyms and anonyms for words, and alternate between the two.

### What is the evidence for rigidity?

Moderate to high quality evidence finds a medium to large effect of more rigidity in people with schizophrenia than in controls, with largest effects found in studies of unmedicated patients, and in studies using the WCST. Moderate to low quality evidence finds medium-sized associations between increased rigidity and greater symptom severity.

#### 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/donate.



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.