



# NeuRA

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## SCHIZOPHRENIA Factsheet

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### What is decision making?

Decision making requires the use of knowledge and experience of a context in order to choose a course of action. The ability to autonomously make decisions is referred to as their decisional capacity. Effective decision-making aims to increase the likelihood of a favourable outcome in the relevant context, selecting responses that avoid unfavourable or harmful outcomes.

An experimental tool used to examine decision-making is the Iowa Gambling Task. On each trial, participants choose a card from one of four decks and receive a monetary gain or loss. Two decks (A, B) are disadvantageous and two decks (C, D) are advantageous. The decks also differ according to the amount of immediate gain, the relative frequency of gains vs. losses and the relative number of net losses. The goal is to maximize monetary outcome through adaptive decision-making across many trials.

Another experimental tool is the MacArthur Competence Assessment Tool, which assesses the ability to understand the relevant information, the ability to reason rationally, the ability to appreciate a situation and its consequences, and the ability to communicate a choice.

### What is the evidence for decision making?

High quality evidence finds medium to large impairments in understanding, appreciation and reasoning decision-making, and a small impairment in expression of a choice decision making. Effect sizes were smaller in studies using enhanced informed consent for people with schizophrenia. Moderate to high quality evidence found poorer performance on the Iowa Gambling Task, with more A and B deck choices and fewer D deck choices.

Moderate quality evidence finds more severe psychotic symptoms and poorer verbal cognitive functioning are associated with reduced decision-making ability about treatment (small to medium-sized effects).

For more information see the technical table



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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 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](https://neura.edu.au/donate/schizophrenia).