Major depressive episodes are difficult to treat, with only 30-45% of patients responding to initial treatment. The two major modalities for the treatment of depression consist of medications and/or Cognitive Behavioural Therapy (CBT). However, there are currently no validated measures to help predict which patients will respond to which treatment.

Prior research shows that initial changes in emotional processing, in response to antidepressant treatment, can be correlated with treatment success in the long term. Furthermore, as medications and CBT work by different mechanisms, it would seem plausible that specific neuropsychological deficits may predict response to one treatment modality over another. This study will examine whether initial neuropsychological functioning, and change in emotional processing, in depressed adults can predict symptom response to medications or CBT.

Depressed participants with MDD or bipolar disorder type II (BDII) will be prescribed a 10-12 week course of treatment, with either medication or CBT. Participants will complete neuropsychological testing prior to, during, and after commencing treatment. Once the treatment is complete we will analyze whether initial neuropsychological performance is correlated with the degree of treatment response, as assessed by the change in pre and post symptom rating scale scores.

We hypothesize that poorer neuropsychological functioning would predict non-response to treatment, and specific patterns of deficits would be seen in non-responders to one treatment modality over another. We believe our results will provide a cost effective method to help clinicians create a personalized treatment plan for patients with depression.