

CANTAB (Digital) Tests

ATT- Adaptive Tracking Task (10 minutes)

Measures visuomotor coordination and vigilance

CGT- Cambridge Gambling Task (up to 18 minutes) – Akin to Iowa Gambling Task

Assesses decision making and risk taking behaviour outside a learning context

DGS- Digit Span (1-3 minutes depending on achievement) – Akin to WAIS Digit Span

Verbal short term and working memory, measures Forward Span and Backward Span and therefore verbal working memory and attention, and cognitive control and executive function, respectively

DMS- Delayed Matching to Sample (7 minutes)

Assesses visual matching ability and short-term visual recognition memory (non-verbal patterns)

DSST- Digit Symbol Substitution (90 seconds)

Global measure of cognitive ability

EBT- Emotional Bias Task (4 minutes)

Perceptual bias in facial emotion perception

ERT- Emotion Recognition Task (6-10 minutes)

Measures ability to identify six basic emotions in facial expression with continuum of expression magnitude

IED- Intra-Extra Dimensional Set Shift (7 minutes) – Akin to Wisconsin Card Sorting Task

Test of rule acquisition and reversal, featuring visual discrimination and attentional set formation maintenance, shifting and flexibility of attention. Sensitive to changes in fronto-striatal area

MOT- Motor Screening Task (2 minutes)

General screen on whether sensorimotor or comprehension deficits will affect valid data collection

MTS- Match to Sample Visual Search (7 minutes)

Assesses attention and visual searching, with a speed accuracy trade-off

MTT- Multi-tasking Test (8 minutes) – Akin to Stroop

Assesses managing conflicting information and ignoring task-irrelevant information

NBX- N-Back (up to 2 minutes)

Measure of attention and working memory by determining whether the present stimulus matches the one directly before, or two before, depending on variant

OTS- One Touch Stockings of Cambridge (10 minutes) – Akin to Towers of Hanoi test

Test of executive functioning, assessing spatial planning and working memory. This test requires the participant to select how many moves the problem requires

PAL- Paired Associates Learning (8 minutes)

Assesses visual memory and new learning

PRM- Pattern Recognition Memory (4 minutes)

Test of visual pattern recognition memory in 2-choice forced discrimination paradigm

RTI- Reaction Time (3 minutes)

Assesses motor and mental response times, includes movement time, reaction time, response accuracy and impulsivity

RVP- Rapid Visual Information Processing (7 minutes)

Measure of sustained attention

SOC- Stockings of Cambridge (10) minutes

Assesses spatial planning using problem-solving strategies. This test requires participants to move balls in the least amount of moves possible

SSP- Spatial Span (5 minutes)

Assesses visuospatial working memory

SST- Stop Signal Task (Up to 14 minutes) – Akin to Go/No Go tasks

Unique version of classic; measures response inhibition and impulse control

SWM- Spatial Working Memory (4 minutes)

Requires retention and manipulation of visuospatial information with notable executive function demands, providing measures of strategy and memory errors

VPA- Verbal Paired Associates (1-4 minutes depending on achievement; + 30sec delay recall)

Assesses associative and episodic memory, parallel forms available

VRM- Verbal Recognition Memory (10 Minutes)

Test of verbal memory and new learning. Measures encoding and verbal retrieval, tapping into fronto-temporal networks and recognition hippocampal areas