

# CANTAB

World-leading touch screen cognitive assessment

**CANTAB**, the Cambridge Neuropsychological Test Automated Battery, is sensitive to cognitive changes caused by a wide range of Central Nervous System (CNS) disorders and medication effects.

**CANTAB**'s touch screen technology gives rapid and non-invasive cognitive assessment.

Whatever your cognitive assessment needs, in academic research or clinical trials, **CANTAB** can provide a solution.

## CANTAB benefits

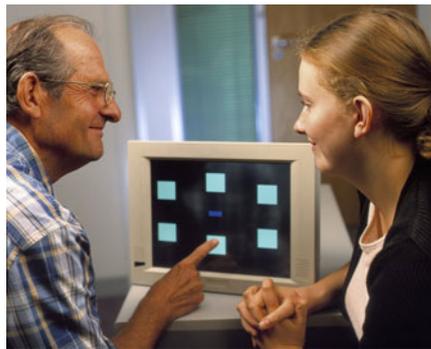
- detects early cognitive changes in many CNS disorders such as Alzheimer's disease, Parkinson's disease, schizophrenia and depression.
- touch screen technology for rapid and non-invasive cognitive assessment
- language-independent tests are ideal for multinational studies and testing very young, disturbed or dementing subjects
- exports results data into spreadsheets and statistical analysis packages
- suitable for repeat testing
- well validated
- easy to use

## CANTAB products

**CANTABelect** – bespoke service for pharmaceutical clinical trials – only the tests required, integrated into a customised package

**CANTABeclipse** – gold standard for academic research – 15 tests, over 120 outcome measures

**CANTABexpedio** – for academic research and clinical screening – 12 tests, 31 outcome measures



## CANTAB credentials

**CANTAB** is:

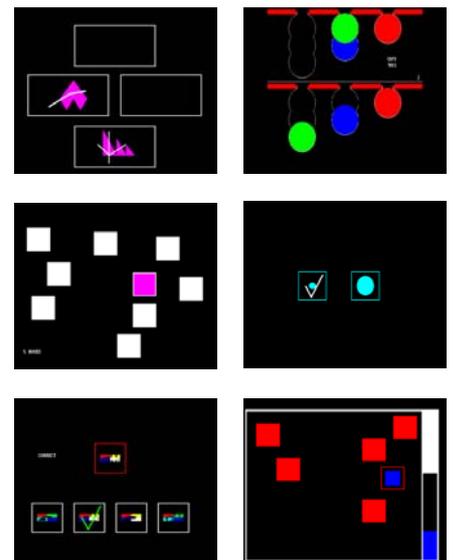
- used in over 400 universities and institutions
- installed in 34 countries
- cited in over 200 publications which are listed in our bibliography

In development for over 15 years, **CANTAB** has a well standardised and validated, large normative database.

## What is CANTAB?

**CANTAB**'s appealing, game-like tests allow a wide variety of cognitive functions to be assessed simply and accurately:

- memory
- attention
- perceptual matching
- executive functioning
- comprehension



Sample screens from six of the CANTAB tests

## Fifteen CANTAB tests to analyse different components of cognition

There are now **fifteen tests** in the **CANTAB** battery:

<b>MOT</b>	Motor Screening
<b>AGN</b>	Affective Go/No-go - NEW
<b>BLC</b>	Big/Little Circle
<b>DMS</b>	Delayed Matching to Sample
<b>IED</b>	Intra-Extra Dimensional Set Shifting
<b>MTS</b>	Matching to Sample Visual Search
<b>PAL</b>	Paired Associates Learning
<b>PRM</b>	Pattern Recognition Memory
<b>RTI</b>	Reaction Time
<b>RVP</b>	Rapid Visual Processing
<b>SOC</b>	Stockings of Cambridge
<b>SRM</b>	Spatial Recognition Memory
<b>SSP</b>	Spatial Span
<b>SWM</b>	Spatial Working Memory
<b>VRM</b>	Verbal Recognition Memory - NEW

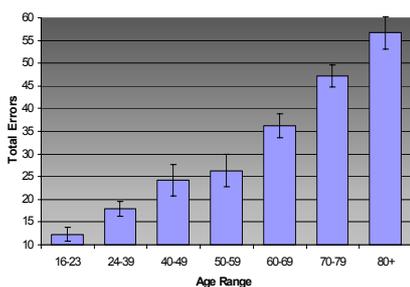
All tests, except VRM and AGN, are language-free.

**CANTAB** lets you select which of the tests you wish to administer to which subjects. You can set up one or many test schedules, according to your needs.

With 15 years of expertise, Cambridge Cognition can advise you on which tests are most appropriate for your requirements.

## Normative database

The comprehensive normative database contains data from over 2000 healthy subjects tested with **CANTAB** across a wide age and IQ range.



Mean Spatial Working Memory total errors scores over a range of age groups

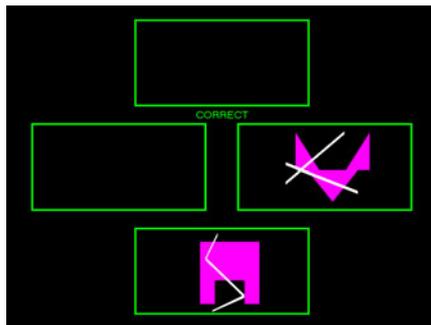
These norms provide a convenient and easy way of characterising the performance of both healthy subjects and patients.

Both adult and child normative data are now supplied as standard.

## Increasing task demands for more informative cognitive testing

On many psychological tests the challenge of interpreting impaired performance includes identifying exactly which aspect of the task is causing difficulty.

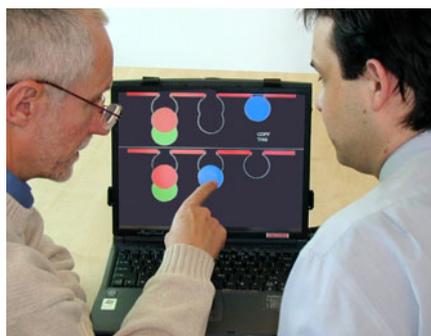
**CANTAB** tests such as IED (Intra-Extra Dimensional Set Shifting) begin with simple visual discrimination and then gradually introduce greater complexity, one step at a time, so that the point at which the test becomes too difficult is easily determined.



A late stage of the Intra-Extra Dimensional Set Shifting test showing compound stimuli. At the beginning of the test, simple stimuli are used. This tests rule acquisition and reversal.

## Controlling for movement disability

Subjects with impaired movement are often disadvantaged in psychological testing, as response speed is a primary index of ability. The Stockings of Cambridge test has a yoked motor control component, so that movement time can be allowed for, and “thinking time” can be measured.

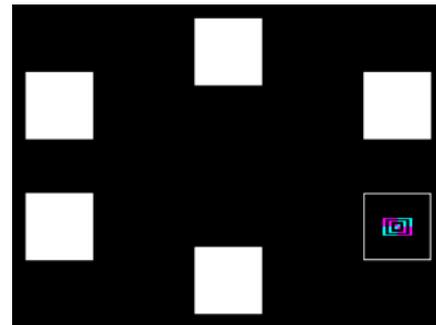


The Stockings of Cambridge test in the yoked following phase, compensating for movement time and allowing the calculation of “thinking time”

## CANTAB tests are carefully designed to avoid “floor and ceiling” effects

Tests that are too simple are insensitive to mild cognitive impairment, whereas tests that subjects are unable to do at all are insensitive to changes in disease severity and treatment intervention.

**CANTAB** tests such as SWM (Spatial Working Memory) or PAL (Paired Associates Learning) start off at a simple level and get progressively harder, so that later stage problems challenge the abilities of even very able subjects.



A pattern from the Paired Associates Learning test – the subject must remember the location of each pattern displayed. Easy in the early stages with one pattern; much harder with six.

## System requirements

These vary depending on which version of the software you require. Please ask for the separate Hardware requirements datasheet.



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