

Appendix III: MicroCog™

MicroCog™ is a computer administered and scored test of mental competence. It consists of 15 subtests that are arranged to test selected brain functions. To us its value lies in the traceability to previously defined brain modules. It serves as a record of gains by the client attributable to intervening brain-work.

As a memory exercise it is susceptible to memory retention on retest. I have formed several versions with different memory parts to reduce this problem. The client can be retested every 10 sessions without contamination from having taken the test previously. Like the T.O.V.A. the scores are normalized to 100 for the average person whose age and education are similar to the test taker. MicroCog normalized only for test takers 18 years and above. It posts a warning if administered to a child. Children who can read at age 10 can take the test. The reported values cannot be interpreted according to the normalized scores. None-the-less it can serve as a useful record for objective determination of intellectual gains.

Gains of 0.6 points per session are average gains for HEG. Occasionally gains of 2.0 points per session of GCP.

Nine Interrelated Areas

The standard form includes 18 subtests that contribute to summary scores

Level 1:

- Attention/Mental Control
- Information Processing
- Reaction Time
- Accuracy
- Memory

Level 2:

- Information Processing Speed
- Reasoning/Calculation
- Spatial Processing

Level 3:

- Cognitive Functioning
- Cognitive Proficiency

These last two are overall scores similar to total IQ and become a general test for improvements in IQ

The individual subtests and scalp locations are:

Wordlists 1 and 2 T3 30 minute memory delay.

Story 1 and 2 Fp1 & T3 working and 30 minute delayed memory.

Address T3 for memory delayed recall.

Tic-Tak 1 and 2 T4 spatial working memory.

Timers 1 and 2 Fp1 reaction time.

Clocks T4 spatial recognition.

Object Match T4 spatial recognition and spatial logic.

Numbers Fwd. Rev. Fp1 & F7 working memory.

Math Calculations T5&Fp1 working memory and impulsivity.

Analogies F3 logical association of familiar concepts

Alphabet Fp1&Fz persistent on task working memory

Target specific concerns of cognitive impairment in adults and shorten testing time with MicroCog™:
Assessment of Cognitive Functioning, Version 2.4 (MicroCog™).

MicroCog is designed for use as a screening instrument or as a diagnostic test for cognitive or neuropsychological evaluation.

MicroCog covers a broad range of cognitive functioning, including both the accuracy and speed of cognitive processing. The updated version allows you to choose only those subtests you want to administer.

User-Friendly Software

Most examinees can complete the test with minimal assistance after a brief orientation by a testing assistant.

Test-Retest

MicroCog is also effective in test-retest situations to monitor a patient's ongoing cognitive status.

Nine Interrelated Areas

The standard form includes 18 subtests that contribute to summary scores for nine interrelated areas of functioning:

- Attention/Mental Control
- Information Processing
- Reaction Time
- Accuracy
- Memory
- Information Processing Speed
- Reasoning/Calculation
- Cognitive Functioning
- Spatial Processing
- Cognitive Proficiency

Related Scores

Concurrent validity studies are available with a broad range of neuropsychological tests, including the Wechsler Adult Intelligence Scale®-Revised (WAIS-R®) and the Wechsler Memory Scale®-Revised (WMS®-R).