

Neuropsychological Assessment Test Battery

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General Instruction

Testing should be performed in a very quiet room, not far from a hallway. A sign "Test in Progress - Do Not Disturb" should be put on the outside surface of the door. Any phone should be disconnected and any beeper should be stopped. The examiner should check that s/he has all the material needed for the tests before the subject arrives. The examiner and the subject should sit at a table facing each other. The subject should not face a window. The table should be completely clean, with no cup of coffee or tea on it. Water should be available for the subject. If anyone comes into the room while the test procedure is ongoing, the examiner should stop him/her until trial is completed. Before starting the test procedure the examiner should be sure that the subject has his/her glasses on, if needed. She should briefly explain to the subject that s/he is going to test his/her memory, attention and some other abilities, and that this could take between one hour and one hour and a half.

Handedness

Before starting the administration of the tests, ask the subject for handedness:
Using both hands, place a pencil directly in front of the subject and ask him/her to draw a picture. Record the hand that he/she uses.

1. Finger Tapping

Approximate time required for administration : 10 minutes.

Purpose of the test is to measure motor speed/maximum oscillation rate of the index finger of each hand.

Using a special adapted tapper, the subject is instructed to tap as rapidly as possible using the index finger. The finger tapper score is the mean of five consecutive 10-second trials. Additional trials (up to a maximum of 10) may be administered if performance across the first 5 trials is not consistent.

2. Auditory Verbal Learning Test (AVLT)

Approximate time required for administration : 10-15 minutes with a 30-minute delayed recall and recognition.

Purpose of this test is to assess verbal learning and memory (immediate recall, delayed recall, delayed recognition)

The AVLT is administered by reading the words aloud, then asking the individual to verbally repeat the list of words (immediately and after a delay) and to identify the words from the list from a verbal presentation (including both the target words and the distractors).

3. Brief Visuospatial Memory Test(BVMT)

Approximate time required for administration : 10-15 minutes with a 25- minute delayed recall and recognition.

Purpose of this test is to measure visuospatial memory.

The materials include the Professional Manual, the Recall Stimulus Booklet, the Recognition Stimulus Booklet (easel format), and the Response Form. Administration requires a pencil and the Recall Stimulus Booklet. In the three Learning Trials, the respondent views the Recall Stimulus page for ten seconds and then is asked to draw as many of the figures as possible in their correct location on a page in the Response Booklet. After a 25-minute delay which includes primarily verbal activities, the task is repeated. Then, the respondent is asked to identify which of the 12 figures in the Recognition Stimulus Booklet were included in the six geometric figures on the original Recall Stimulus page.

4. Color Trails Test: Color Trails1 and Color Trails 2

Approximate time required for administration : 5-8 minutes.

These are tests of speed for attention, sequencing, mental flexibility and visual search and motor function.

The tests are paper and pencil based. Color Trials1 required the patient to rapidly connect encircled numbers scattered on a page in sequence from 1 to 25. In Color Trails2, each number is presented twice, once with a pink background and once with a yellow background, and on this part the patient rapidly connects encircled numbers in sequence, but alternates between pink and yellow colors. The score for each part is the time (in second) to completion. The Color Trails Test is similar to Trail Making Tests but does not require knowledge of the alphabet, and as such is recommended for use with patients who speak English as a second language.

5. EIWA Digit Symbol

Approximate time required for administration : 5 minutes.

Purpose of this test is to evaluate psychomotor speed.

On this test individuals are required to replace numbers for symbols based on a key held in constant view at the top of the response page. The dependent variable is the number of correct substitutions completed in 90 seconds.

6. Grooved Pegboard

Approximate time required for administration : 5 minutes.

Purpose of the test is to assess manual dexterity/co-ordination for the dominant and nondominant hand.

The Grooved Pegboard is a manipulative dexterity test which consists of 25 holes with randomly positioned slots in a 5x5 matrix. Pegs, which have a key along one side, must be rotated to match the hole before they can be inserted. This test requires more complex visual-motor co-ordination than most pegboards. The score is the time to completion in seconds, obtained for dominant and nondominant hands.

7. Timed Gait

Approximate time required for administration : 5 minutes.

Purpose of the test is to measure speed of gait.

A stopwatch and a clear, measured 10 yard (9.14 metres) length are required. Patients will be asked to walk 10 yards (9.14 metres), as quickly as possible without running then turn around and walk back 10 yards (9.14 metres) and this will be timed. Patients will be asked to do this three times and their score will be the average of the time taken for each of the three attempts.

8. Verbal Fluency (First Names)

Approximate time required for administration : 5 minutes.

Individual to say out loud as many different first (given) names of people as he/she can call to mind in one minute. Names can be male or female..

9. Trail Making Test: Part A

Approximate time required for administration : 5 minutes.

Purpose of the test is to assess speed for attention, sequencing, mental flexibility, visual search and motor function.

It requires the connection, by making pencil lines, between encircled numbers randomly arranged on page, in proper order (Part A) and 25 encircled numbers. The time taken by the patient to complete part A is recorded in seconds. Interpretation is based on comparison to published normative data appropriate to age, sex, and education level.

10. EIWA Block Design

Approximate time required for administration : 10-15 minutes.

Materials: 9 blocks (cubes) colored red on two sides, white on two sides, and red/white on two sides. 11 cards with printed designs, bound into a booklet.

The subject constructs a block model from each design of printed cards. The time limit allowed for each of Designs 1-7 is 60 seconds and 120 seconds for each of Designs 8-10. Bonus points are allotted for quick perfect performance on Designs 8-10.

11. Verbal Fluency (Animal Naming)

Approximate time required for administration : 5 minutes.

Individual to say out loud as many different names of animals as he/she can think of in one minute. Any name of an animal is ok.

Details of Finger Tapper, Grooved Pegboard & Color Trails Test can be found on the PAR Inc. website www.parinc.com but may be purchased in Australia through ACER: www.acerpress.com.au or phone 1800 338 402 (toll free). Alternatively the test can be purchased through Lafayette Instrument Co.: <http://www.lafayetteinstrument.com>.

Test use and interpretation is restricted to suitable qualified professionals.

Reference: Spreen O, Strause E. A compendium of neuropsychological tests. Administration, norms and commentary. Second Ed. New York: Oxford University Press; 1998.

Reference: D'Elia LF, Satz P, Uchiyama CL, T W. Color Trails Test. Odessa, FL: Psychological Assessment Resources, Inc.;1996.