Montreal Cognitive Assessment (MoCA) Test for Dementia

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The Montreal Cognitive Assessment (MoCA) is a brief 30-question test that takes around 10 to 12 minutes to complete and helps assess people for dementia. It was published in 2005 by a group at McGill University working for several years at memory clinics in Montreal.

Here's a look at what the MoCA includes, how it's scored and interpreted, and how it can assist in identifying dementia.
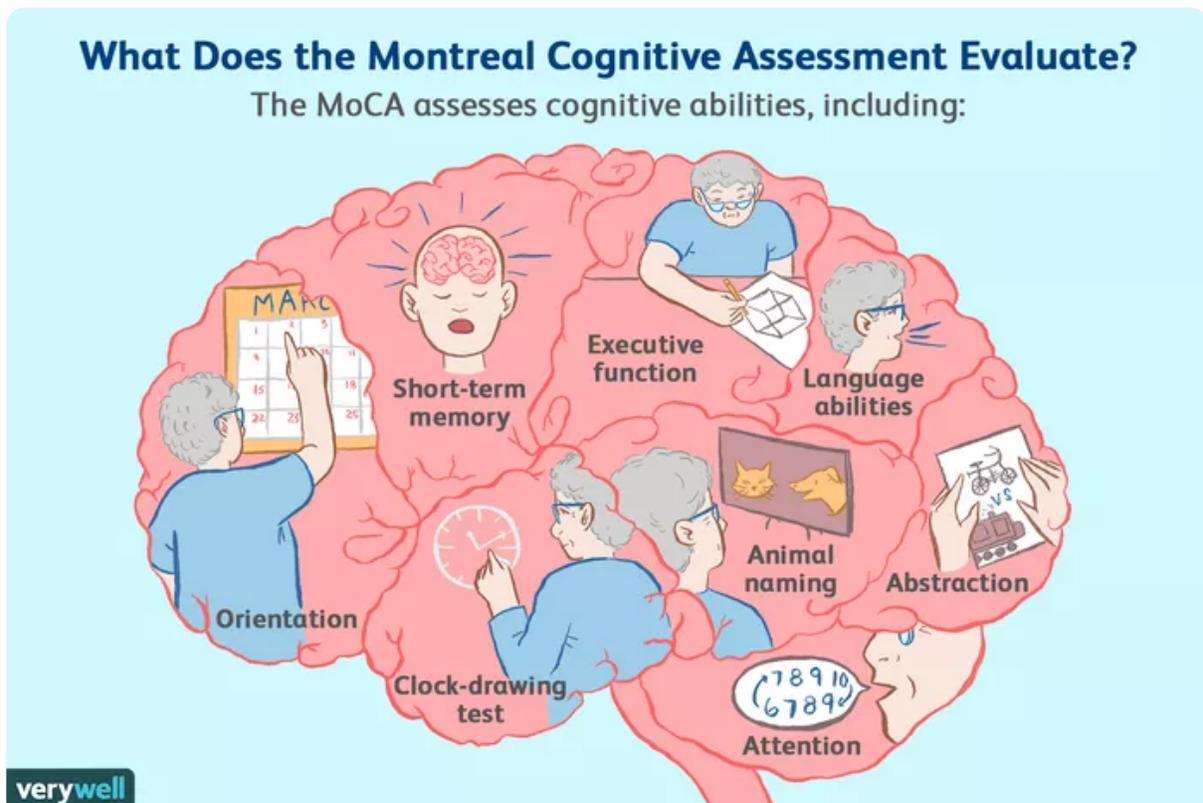
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Assessment

The MoCA evaluates different types of cognitive abilities. These include:

- **Orientation**: The test administrator asks you to state the date, month, year, day, place, and city.

- **Short-term memory/delayed recall**: Five words are read, the test-taker is asked to repeat them, they are read again and asked to repeat again. After completing other tasks, the person is asked to repeat each of the five words again and given a cue of the category that the word belongs to if they are not able to recall them without the cue.

- **Executive function/visuospatial ability**: These two abilities are assessed through the Trails B Test, which requires you to draw a line to correctly sequence alternating digits and numbers (1-A, 2-B, etc.) and through a task which requires you to draw a copy of a cube shape.

- **Language abilities:** This task consists of repeating two sentences correctly and then listing all of the words that can be recalled that begin with the letter "F".

- **Abstraction**: You are asked to explain how two items are alike, such as a train and a bicycle. This measures your abstract reasoning, which is often impaired in dementia. The Proverb interpretation test is another way to test abstract reasoning skills.

- **Animal naming:** Three pictures of animals are shown and the individual is asked to name each one.

- **Attention:** The test-taker is asked to repeat a series of numbers forward and then a different series backwards to evaluate attention.

- **Clock-drawing test**: Unlike the Mini-mental state exam (MMSE) which does not include the clock drawing test, the MoCA asks the person being evaluated to draw a clock that reads ten past eleven.

Scoring

Scores on the MoCA range from zero to 30, with a score of 26 and higher generally considered normal.

In the initial study data establishing the MoCA, normal controls had an average score of 27.4, compared with 22.1 in people with mild cognitive impairment (MCI) and 16.2 in people with Alzheimer's disease.

The scoring breakdown is as follows:

- Visuospatial and executive functioning: 5 points

- Animal Naming: 3 points

- Attention: 6 points

- Language: 3 points

- Abstraction: 2 points

- Delayed recall (short-term memory): 5 points

- Orientation: 6 points

- Education level: 1 point is added to the test-taker's score if they have 12 years or less of formal education

Usefulness

The MoCA is a relatively simple, brief test that helps health professionals determine quickly whether a person has abnormal cognitive function and may need a more thorough diagnostic workup for Alzheimer's disease.

It may help predict dementia in people with mild cognitive impairment (MCI), and because it tests for executive function, it is more sensitive in this regard than the MMSE. Finally, it's been shown to better identify cognitive problems in people with Parkinson's disease.

Advantages vs. Disadvantages

The MoCA's advantages include its brevity, simplicity, and reliability as a screening test for Alzheimer's disease. In addition, it measures an important component of dementia that's not measured by the MMSE, namely executive function. It seems to work well in Parkinson's disease dementia, and unlike the MMSE, it is free for non-profit use.

Of note, the MoCA is available in more than 35 languages, and there is also a MoCA Test Blind which allows cognitive testing for those who are visually impaired.

A disadvantage of the MoCA is that it takes a little longer than the MMSE to administer, and like many other screenings, it should be paired with multiple other screenings and tests to accurately identify and diagnose dementia.

A Word From Verywell

Being aware of what the MoCA includes and how it's scored can help you better understand its results for you or your loved one. Remember, also, that the MoCA, while helpful in identifying cognitive concerns, should be combined with several other assessments conducted by a physician in order to fully evaluate mental functioning and identify possible causes of memory loss.

Read Next: [How Accurate Is a BIMS Score in Identifying Dementia?](#)

Article Sources

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Additional Reading

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