

## How useful are cognitive tests? The answer might surprise you.

What memory glitches may mean and how to deal with them.

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A doctor explains the results of a medical test to a senior adult patient. (iStock)



Guest column by [Steven Petrow](#)

August 11, 2024 at 7:00 a.m. EDT

Twenty years ago, at a particularly stressful time in my mid-40s, I thought I was losing my mind — or at least my memory. I sometimes had trouble coming up with words — initially names, then simple phrases (like referring to the proverbial “night owl” as a “night bird”). Each flub made me anxious, which then worsened my memory issues. Listening to my inner hypochondriac, I became convinced I had a brain tumor. I went to see my primary care doctor.

She asked me a series of questions. “What year is it?” “What’s today’s date?” “Who’s the president?” I was batting 1.000 until she asked me to spell “w-o-r-l-d” backward, when I faltered. My pulse began to race. “Can you count backwards from 100 by sevens?” she queried me. I got to 93 but could go no further, which is when I broke down sobbing, convinced I’d been right about my diagnosis.

“You don’t have a brain tumor or a [cognitive deficit](#),” she told me. “But you do have an anxiety disorder,” she said abruptly, knowing the stress I’d been under. She prescribed medication for the anxiety and suggested I begin a meditation practice.

I’m not the only one I know to worry about my cognition or brain health. [According to a 2020 study](#), two-thirds of Americans experience some level of cognitive decline by age 70. The lifetime risk for dementia for women is 37 percent (24 percent for men). These are stats that will make you pay attention.

Notably, there are key differences among populations. Higher education and continued learning appear to build up a “[cognitive reserve](#)” that can help stave off symptoms. Disadvantaged groups experience a younger age of onset, higher lifetime risk and more years of cognitive impairment than their more advantaged counterparts. Race and ethnicity seem to count, too: White women average six years of cognitively impaired life compared with 12 and 13 years among Black women and Latinas.

Unbeknownst to me, my doctor had used one of the most commonly used cognitive assessment tools (also known as memory tests), the [Mini-Mental State Exam](#) (MMSE). It’s considered highly effective in recognizing cognitive impairment and revealing changes that may benefit from intervention.

But if you’re considering getting tested to assuage anxiety or to learn more, know that cognitive assessments don’t tell the whole story. [Ronald Petersen](#), a neurologist at the Mayo Clinic who specializes in the cognitive changes associated with aging, notes that “they give us an approximate idea of how someone is doing cognitively, but they’re not diagnostic.”

He won’t tell a patient to stop driving based on the results, for example, and he can’t use them to make a diagnosis of Alzheimer’s disease. Screening tests don’t reveal why there may be cognitive impairment, where in the brain there’s a problem, or what condition might be causing it.

Petersen explained that these screenings are like blood pressure readings, providing “a metric, a number that we can put on cognitive function that helps us assess where the person is now and, most importantly, where they may be going if, in fact, we do this [testing] on a regular basis.”

This is why psychologist Stephen Rao, who heads up the [cognitive neuroimaging center](#) at Cleveland Clinic, recommends annual assessments for those 65-plus. All patients in his facility are given a battery of tests during their yearly wellness appointments to measure and track cognitive function (orientation, registration, attention/calculation, recall, and language).

If the findings suggest a noticeable change or an abnormality, Rao can recommend more sophisticated testing, including an MRI or PET scan, a lumbar puncture to look at cerebrospinal fluid (which [can help diagnose](#) Alzheimer’s), and [blood biomarker tests](#), seen as an emerging option for detecting the abnormal buildup of proteins that could be an early sign of Alzheimer’s disease.

Medicare covers cognitive assessments during an annual wellness visit, but Petersen says many primary care doctors are uncomfortable administering them. They don't know which tests to use — some are as simple as the one my doctor used, but others can take up to 25 minutes to administer — how to interpret the results and what to do with abnormal findings. A [recent poll](#) showed 80 percent of older adults see the benefit of assessments, with 60 percent saying they'd like their health-care providers to offer them. At the same time, 80 percent haven't been tested in the past year and 59 percent report never having had one.

It's important to differentiate the changes to be expected during aging from actual cognitive impairment. "It's not black and white," says Petersen, adding that normal aging includes occasionally forgetting the names of acquaintances, missing a monthly payment, having trouble finding the right word, and losing things.

More troubling signs might be forgetting names of close family members, often being unable to find things, ongoing problems managing bills, or difficulty maintaining a conversation. It may be time for a cognitive test if you are asking the same question repeatedly, getting lost in places you know well, or having trouble following recipes.

Some people are hesitant to take a cognitive assessment due to privacy concerns or because they incorrectly assume that nothing could be done with the results or are worried what they might find out. But Rao said that about 40 percent of dementia cases "can either be reversed or slowed down if detected early."

He also emphasized that screening can alert doctors to look for other, treatable, issues that may cause cognitive decline. For instance, doctors say, blood clots may cause memory issues, as can some medications, a head injury, alcohol or drug misuse, too little sleep, and low levels of crucial nutrients (such as vitamin B12). Depression and stress can also affect memory. The good news, says Petersen, is that memory problems may go away once the underlying condition is treated.

That's why next month, when I go in for my annual wellness visit, I'm going to ask my doctor for a cognitive assessment. I've learned a trick or two since my last test: It's much easier to do the countdown exercise (repeatedly subtract 7 from 100) if you subtract 10 and then add three back. Also, it's not hard to

memorize how to spell “w-o-r-l-d” backward. As long as my doctor doesn’t give me a different word, I should do fine.



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<https://www.washingtonpost.com/wellness/2024/08/11/alzheimers-anxiety-cognitive-testing-memory/>

I have a difficult—and I admit, not entirely rational, objective, or balanced—view of such testing. Having administered the tests that a school psychologist employs, seriously studying the business, I have a profound skepticism about them—unless I am administering them, or I know and trust the psychologist. The *total person* being tested matters primarily to me, with history and current state proving central to the context in which scores are to be placed. Observing, interacting and empathizing with, the person being tested is critical. Testing is always culture-bound depending upon a “common body of experience” that is a shaky concept at best. Further, on the premise of ensuring objectivity—that tests are administered in the same almost “blank screen” manner to all recipients, including the population on which the norms were standardized—too often, I suspect, we sample and reap “test-taking behavior” rather than uninhibited actual abilities. To a skeptical or worried kid or two I have said “Look, we both know you are smart and can do things. Let’s just treat this like a video game and rack up points. The test is designed so that no one can do it all correctly or score the max on everything; just keep giving it your best shot and don’t worry about looking ‘stupid’.” Of course, this violates testing protocol, and “invalidates” the results, but I at least could come away feeling I had actually got a sense and feeling for what the child could do.

The MMSE is a terrible test, and it appalls me that doctors still use it. I have seen nurses administering it for them obviously clueless about the nuances of what they were doing. You cannot fool me with “Oh, we only use it for screening purposes.” But if you are getting faulty data in a small sample to interpret what is that worth? And how do you deal with false negatives? Too many doctors are far too ready to make quick decisions based on supposedly “scientific” testing. There are better tests (e.g. the Montreal Cognitive Assessment) but they take longer. Yet more important than anything is taking the time to get to know the patient, to get as many informed perspectives on the current situation as possible, and in a balanced assessment sort out fact from fiction or exaggeration/distortion given all the agendas, anxieties, and fears that accrue around and in someone struggling with cognitive decline. TJB