

Long COVID may harm cognition

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In a finding that unearths yet another way Long COVID can harm health, new research finds the condition may trigger thinking declines.

Published Thursday in the [New England Journal of Medicine](#), the study involved cognitive testing on nearly 113,000 people in England. It found that those with Long COVID scored 6 IQ points lower than people who had never been infected with the virus.

Even folks who didn't suffer lingering symptoms after a bout of COVID scored slightly lower than people who had never been infected—in this case, by 3 IQ points.

Still, the differences in scores were small and experts stressed the findings don't mean that COVID causes profound deficits in thinking and memory. However, they do provide proof that the brain fog many folks who get Long COVID experience is likely not imagined.

"These emerging and coalescing findings are generally highlighting that, yes, there is [cognitive impairment](#) in Long COVID survivors—it's a real phenomenon," [James Jackson](#), a neuropsychologist at Vanderbilt Medical Center who wasn't involved in the study, told the *New York Times*.

Luckily, the latest study suggests that if people's Long COVID symptoms resolve themselves, the related thinking impairments might also ease. Study volunteers who had Long COVID for months before finally recovering eventually had testing scores similar to those who had experienced a quick recovery.

Importantly, the standard variation on an IQ score is about 15 points, so a shift of 3, or even 6, points is not usually considered significant, the *Times* reported.

Still, Jackson, who wrote a book about Long COVID titled "Clearing the Fog," said that while the tests "identify relatively mild deficits," that can still make a difference in some cases.

"If you're an engineer and you have a slight decline in executive functioning, that's a problem," he noted.

In the study, led by researchers at Imperial College London (ICL), nearly 113,000 completed an online cognitive test during the last five months of 2022. About 46,000 of the respondents said they had never had COVID, while another 46,000 who had been infected said their illness lasted less than four weeks.

Meanwhile, about 3,200 people had post-COVID symptoms lasting four to 12 weeks after infection and about 3,900 people had symptoms that went beyond 12 weeks. Of those, 2,580 people were still having Long COVID symptoms when they took the test.

The test consisted of eight tasks designed to evaluate skills such as spatial planning, verbal reasoning, word definitions and memory.

Senior study author Paul Elliott, chair of epidemiology and public health medicine at ICL, told the *Times* that the study measured performance at only one point in time, so it was impossible to know if other stresses in people's lives had played a part in their test scores.

The lowest scores were generally seen in people who had infections earlier in the pandemic, before vaccines and antiviral treatments were available. Meanwhile, people who had been vaccinated performed somewhat better than those who had not.

Dr. Ziyad Al-Aly, chief of research and development at the V.A. St. Louis Health Care System who co-wrote an [editorial](#) accompanying the study, said the findings raise many questions, including how significant the deficits were in real life.

"The SARS-CoV-2 pandemic produced in its wake millions of persons

affected with Long COVID, some of whom have had or are currently having cognitive challenges," the editorial stated. "A deeper understanding of the biology of cognitive dysfunction after SARS-CoV-2 infection and how best to prevent and treat it are critical for addressing the needs of affected persons and preserving the cognitive health of populations."

More information: Visit the U.S. Centers for Disease Control and Prevention for more about [Long COVID](#).

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