

OPINION
GUEST ESSAY

I'm a Neuroscientist. We're Thinking About Biden's Memory and Age in the Wrong Way.

Feb. 12, 2024



Doug Mills/The New York Times

[Share full article](#) [↗](#) [🔖](#) [💬 612](#)

By Charan Ranganath

Dr. Ranganath is a professor of psychology and neuroscience and director of the Dynamic Memory Lab at the University of California, Davis, and the author of the forthcoming book "Why We Remember: Unlocking Memory's Potential to Hold on to What Matters."

Special Counsel Robert K. Hur's report, in which he declined to prosecute President Biden for his handling of classified documents, also included a much-debated assessment of Mr. Biden's cognitive abilities.

"Mr. Biden would likely present himself to a jury, as he did during our interview with him, as a sympathetic, well-meaning, elderly man with a poor memory."

As an expert on memory, I can assure you that everyone forgets. In fact, most of the details of our lives — the people we meet, the things we do and the places we go — will inevitably be reduced to memories that capture only a small fraction of those experiences.

It is normal to be more forgetful as you get older. Broadly speaking, memory functions begin to decline in our 30s and continue to fade into old age. However, age in and of itself doesn't indicate the presence of memory deficits

that would affect an individual's ability to perform in a demanding leadership role. And an apparent memory lapse may or may not be consequential depending on the reasons it occurred.

There is forgetting and there is Forgetting. If you're over the age of 40, you've most likely experienced the frustration of trying to grasp hold of that slippery word hovering on the tip of your tongue. Colloquially, this might be described as 'forgetting,' but most memory scientists would call this "retrieval failure," meaning that the memory is there, but we just can't pull it up when we need it. On the other hand, Forgetting (with a capital F) is when a memory is seemingly lost or gone altogether. Inattentively conflating the names of the leaders of two countries would fall in the first category, whereas being unable to remember that you had ever met the president of Egypt would fall into the latter.

Over the course of typical aging, we see changes in the functioning of the prefrontal cortex, a brain area that plays a starring role in many of our day-to-day memory successes and failures. These changes mean that, as we get older, we tend to be more distractible and often struggle to pull up the word or name we're looking for. Remembering events takes longer and it requires more effort, and we can't catch errors as quickly as we used to. This translates to a lot more forgetting, and a little more Forgetting.

Many of the special counsel's observations about Mr. Biden's memory seem to fall in the category of forgetting, meaning that they are more indicative of a problem with finding the right information from memory than actual Forgetting. Calling up the date that an event occurred, like the last year of Mr. Biden's vice presidency or the year of his son's death, is a complex measure of memory. Remembering that an event took place is different than being able to put a date on when it happened, the latter of which is more challenging with increased age. The president very likely has many memories of both periods of his life, even though he could not immediately pull up the date in the stressful (and more immediately pressing) context of the Oct. 7 attack on Israel.

Other "memory" issues highlighted in the media are not so much cases of forgetting as they are of difficulties in the articulation of facts and knowledge. For instance, in July 2023, Mr. Biden mistakenly stated in a speech that "we have over 100 people dead," when he should have said, "over one million." He has struggled with a stutter since childhood, and research suggests that managing a stutter demands prefrontal resources that would normally enable people to find the right word or at least quickly correct errors after the fact.

Americans are understandably concerned about the advanced age of the two top contenders in the coming presidential election (Mr. Biden is 81 and Donald Trump is 77), although some of these concerns are rooted in cultural stereotypes and fears around aging. The fact is that there is a huge degree of variability in cognitive aging. Age is, on average, associated with decreased memory, but studies that follow up the same person over several years have shown that, although some older adults show precipitous declines over time, other “super-agers” [remain](#) as sharp as ever.

Mr. Biden is the same age as Harrison Ford, Paul McCartney and Martin Scorsese. He’s also a bit younger than Jane Fonda (86) and a lot younger than Berkshire Hathaway CEO Warren Buffett (93). All these individuals are considered to be at the top of their professions, and yet I would not be surprised if they are more forgetful and absent-minded than when they were younger. In other words, an individual’s age does not say anything definitive about their cognitive status or where it will head in the near future.

I can’t speak to the cognitive status of any of the presidential candidates, but I can say that, rather than focusing on candidates’ ages per se, we should consider whether they have the capabilities to do the job. Public perception of a person’s cognitive state is often determined by superficial factors, such as physical presence, confidence, and verbal fluency, but these aren’t necessarily relevant to one’s capacity to make consequential decisions about the fate of this country. Memory is surely relevant, but other characteristics, such as knowledge of the relevant facts and emotion regulation — both of which are relatively preserved and might even improve with age — are likely to be of equal or greater importance.

Ultimately, we are due for a national conversation about what we should expect in terms of the cognitive and emotional health of our leaders.

And that should be informed by science, not politics.

<https://www.nytimes.com/2024/02/12/opinion/neuroscientist-on-biden-age-memory.html>

It would be harder to nail down Trump’s “memory problems.” For a lifetime, he has operated as though there is no Truth; the truth is, you make it up as necessary, you present “truthfully” and “factually” as it serves your purpose, and you make the past, present, and future what works for your goals. “Just like everyone else, especially those privileged liars who aren’t honest like me.” Everyone else—at least those you are competing with—have to be reduced to your terms, and be cast as worse for “pretending” they are better. TJB