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Two languages make your brain buff.

If you had any doubts about exposing your child - or yourself - to a foreign language, there's more evidence than ever that being bilingual has enormous benefits for your brain.

Scientists presented their research supporting this idea Friday at the American Association for the Advancement of Science annual meeting in Washington, D.C.

As the human body begins its natural decline in old age, bilinguals seem to maintain better cognitive function, said Ellen Bialystok of York University in Toronto, Ontario. This is the case even for people with dementia. Bialystok and colleagues have studied many Alzheimer's patients, both monolinguals and bilinguals. They found that bilinguals were on average four to five years older than monolinguals at comparable points of neurological impairment.

Once Alzheimer's disease begins to compromise the brain, it appears that bilinguals can continue to function even though there's damaged tissue, she said.

So what's going on? One theory is that language learning is an example of "cognitive reserve." It something that keeps the mind active in the same way as puzzles and games do, and works toward compensating for the build-up of dementia-causing pathology in the brain, Bialystok said.

In terms of starting language learning in middle or old age, the likelihood of becoming truly fluent in a new tongue is low, but it seems that every little bit helps in preventing cognitive decline, she said. And proficiency may be more important than age of acquisition, said Judith Kroll, researcher at Pennsylvania State University, before the conference.

Bilinguals are also better than monolinguals at multitasking, Kroll said. Juggling their languages helps bilinguals ignore irrelevant information and prioritize tasks better than those who only can only speak on tongue, she has found in her research. That makes sense considering that when a bilingual person speaks one language, the other language is still potentially active. That means that speakers of two languages are constantly inhibiting one language in favor of another, which perhaps enhances their overall attentional skills.

Why is it so hard for adults to learn a new language, compared with kids? The answer might not lie entirely in the brain. The social, educational, and other circumstantial conditions are different when an adult gets exposure to language, Bialystok said. As a child, learning a language is pretty much all you do. Adults can't devote as much time or attention to the experience of picking up a new tongue.

"It's a change we can deal with as adults if there's sufficient time and opportunity," she said.

Are there any downsides to being bilingual? Babies exposed to two languages throughout pregnancy, or who hear two languages in their first days of life, don't confuse their languages, said Janet Weker of the University of California, Santa Barbara. The scientific evidence suggests bilingual and monolingual kids have similar language development milestones; it appears that children learning two languages do not experience delays in this regard generally.

There is, however, some research suggesting that the competition that's produced by this mental juggling may introduce a delay in processing. But it's so small that it's not something that would be noticeable consciously, Kroll said. It appears that the benefits of being bilingual outweigh the costs.

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