Bilingual children really DO find it easier to learn a third language in later life, brain activity reveals

- They learn faster than their monolingual counterparts, new research confirms
- Researchers found boosted brain activity in brain scans of bilingual people
- This shows bilinguals learn an extra language using brain processes usually reserved for their native tongue

By HARRY PETTIT FOR MAILONLINE
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Children who learn two languages as they grow up find it easier to learn a third in later life, a study found.

They learn faster than their monolingual counterparts, confirming the theory bilinguals are better at picking up another language, researchers say.

Researchers found boosted brain activity in brain scans of bilingual people which showed they learned an extra language using brain processes usually reserved for their native tongue.

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Children who learn two languages as they grow up find it easier to learn a third in later life, a study found. They learn faster than their monolingual counterparts, confirming the theory bilinguals are better at picking up another language, researchers say (stock image).

The team, from Georgetown University Medical Centre in Washington, DC, compared the learning rate of 13 bilingual college students with 16 monolingual students.

The study's senior researcher, Dr Michael Ullman, said: ‘The difference is readily seen in language learners' brain patterns. ‘When learning a new language, bilinguals rely more than monolinguals on the brain processes that people naturally use for their native language.'

The 13 bilingual participants grew up in the US with Mandarin-speaking parents and learned both Mandarin and English at an early age.

Researchers chose Mandarin-English speakers because both languages differed structurally from the new language being learned.

The 16 monolingual students spoke only English fluently.

The new language was a well-studied artificial version of a Romance language, called Brocanto2, that participants learned to both speak and understand.

NEW LANGUAGES CAN PREVENT DEMENTIA

Learning to speak a second language at any point could help keep your brain sharp as you age, a 2015 study found.

The University of Edinburgh detected a pattern of slower mental decline among the bilingual in a group of 835 people born in 1936.

They were given an intelligence test in 1947 at the age of 11, then retested in their early 70s between 2008 and 2010.

A total of 262 participants could communicate in at least one language other than English. Of those, 195 learnt the second language before the age of 18.

Those who spoke two or more languages had significantly better cognitive abilities in their 70s than their peers.

The strongest effect of bilingualism was seen in general intelligence and reading tests.
Using an artificial language, which has been created for research, allowed the researchers to completely control the learners’ exposure to the dialect.

The two groups were trained in the language over the course of a week for the study, published in the journal Bilingualism: Language and Cognition.

At both earlier and later points of training, learners' brain patterns were examined with electroencephalogram electrodes on their scalps, while they listened to Brocanto2 sentences.

Researchers found boosted brain activity in brain scans of bilingual people which showed they learned an extra language using brain processes usually reserved for their native tongue (stock image)

This captures the natural brain-wave activity as the brain processes language and researchers found clear differences between bilingual and monolingual students.

By the end of the first day of training, the bilingual brains, but not the monolingual brains, showed a specific brain-wave pattern, termed the P600.

P600s are commonly found when native speakers process their language but in contrast, the monolinguals only began to exhibit these effects on the last day of training.

The monolinguals also showed an additional brain-wave pattern not usually found in native speakers of languages on the final day.

The study's lead author, Dr Sarah Grey, said: 'There has been a lot of debate about the value of early bilingual language education.

'Now, with this small study, we have novel brain-based data that points towards a distinct language-learning benefit for people who grow up bilingual.'