

Learning the Words and the Music

Musical instruments

If you want to increase your vocabulary then the best way to do it might be to pick up a guitar, or learn the violin. A new study suggests that learning to play a musical instrument enhances the brain's ability to remember words. "Adults with music training in their childhood demonstrate better verbal memory," said Dr. Agnes Chan of the Chinese University of Hong Kong, who did the research. "They can remember things that you tell them better than those who did not have music training when they were young."

It seems that this extra ability to remember spoken words is based in a specific part of the brain that is enlarged in musicians. "Musicians have asymmetrical left cranial temporal regions of the brain—that is, that part of the brain is relatively larger in musicians than in non-musicians," Dr. Chan told the BBC. "Some data has suggested that that part of the brain is involved in processing heard information. If that part of the brain is relatively larger, it may be better developed and so this explains very nicely our results"

Memory training

Dr. Chan and her colleagues came to their conclusion after studying students. Their research is reported in the latest edition of the journal *Nature*.

"We did the experiment with 60 female college students from our university, and 30 of them have at least six years training with one Western musical instrument [such as the violin and the piano] before the age of 12. The other 30 had received no music training. We assessed their verbal memory by reading them some words and asking them to remember these words - a very common clinical test for memory. We found that people who have had music training can remember about 17% more information than those who have not had any music training."

New therapies

Dr. Chan thinks the process of learning is more important than the actual instrument used. She also believes the ability to remember words through learning to play instruments could have some very real benefits. Dr. Chan thinks this could be developed into a therapy for patients who are suffering from memory loss. "This may provide a new way to look at memory training. We have a lot of amnesia patients, people with memory problems, who also have language problems. So maybe we can think of using music training as a way to improve their memory."

However, Dr. Chan believes the most important message to come from this research is perhaps the simplest. "Well I think our data suggests that it may be good practice to have your kids learn music when they are young," she said.

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