

Musicians Are Probably Smarter Than The Rest Of Us

First Posted: 7/20/11 Updated: 9/19/11

Want to keep your mind healthy and sharp throughout your life? Pick up an instrument. A new study found that musicians might have brains that function better than their peers well into old age. Bet you wish you stuck with those piano lessons after all.

Researchers tested the mental abilities of senior citizens and discovered that musicians performed better at a number of tests. In particular, musicians excelled at visual memory tasks. While musicians had similar verbal capabilities to non-musicians, the musicians' ability to memorize new words was markedly better, too. Perhaps most importantly, the musicians' IQ scores were higher overall than those who spent their lives listening to music rather than performing it.

The experience of musicians also played a role in how sharp their minds were. The younger the musicians began to play their instruments, the better their minds performed at the mental tasks. Additionally, the total number of years musicians played instruments throughout their life corresponded with how strong their brains remained years later.

The study also found that musicians who took the time to exercise between symphonies had even higher-functioning brain capabilities. This finding supports another recent study that reported people who walk regularly maintain healthier brains. With that in mind, perhaps joining a marching band now will make you the smartest person at the retirement home in the future.

ORIGINAL RESEARCH:

Musicians' Brains Stay Sharp as They Age

Summary

While it is known that practicing music repeatedly changes the organization of the brain, it is not clear if these changes can correlate musical abilities with non-musical abilities. The study of 70 older participants, with different musical experience over their lifetimes, provides a connection between musical activity and mental balance in old age. "The results of this preliminary study revealed that participants with at least 10 years of musical experience (high activity musicians) had better performance in nonverbal memory, naming, and executive processes in advanced age relative to non-musicians."

Introduction

Changing one's lifestyle may postpone the onset of problems connected with old age, like Alzheimer's disease. These diseases cause cognitive changes like loss of memory, reasoning, and perception. Adequate rest and physical exercise as well as a lifelong habit of stimulating the mind are favorable for clear thinking in old age. Musical activities, undertaken throughout the lifetime, have an impact on one's mental health during old age. This has been studied in this current research work. Practicing music for a number of years brings about certain changes in brain organization. Comparing the lucidity in old age of those pursued music related activities and those who didn't may help to understand the effect of the music-related reorganization of brain on successful aging.

Methods

- Seventy healthy participants, aged between 60 and 83, were divided into three groups, based on their degree of involvement in musical activities, over their lifetimes.
- The three groups were similar in average age, education, handedness, sex ratio, and physical exercise habits.
- The first group, namely the non-musicians, never received any formal musical training. The second group, the low activity musicians, had one to nine years of training. The third, the high activity musicians, trained for

more than 10 years and played regularly afterward.

-- All were tested for brain strengths such as memory, attention, and language prowess, using standardized tests. Their mastery on the use of language, ability to remember, and ability to express oneself were tested.

Results

-- Verbal intellectual ability and learning, as well as recall of verbal information, were found to be similar across the three groups.

-- The high activity musicians were significantly better at performing tasks based on visual inputs.

-- Although language prowess seemed to be similar across the groups, the high activity musicians' memory for words was significantly better than that of non-musicians.

-- The age at which musical training started affected visual memory, while the number of years of training affected non-verbal memory.

Shortcomings/Next steps

High activity musicians have a better chance of retaining certain mental abilities in old age; however, preexisting factors that may affect their choices have not been considered in this study. Social influences like motivation should be considered in future studies. Effects of musical training on verbal memory need to be analyzed further, by considering changes in brain organization that set in with age. A study on whether the effects of music are generalized or whether they affect only specific parts of the brain could also be undertaken.

Conclusion

Engaging in musical activity for most of one's lifetime significantly helps remember names, and enhances nonverbal memory, the ability to work based on what one sees and mental agility during old age. The habit of physical exercise, in addition to musical involvement, further adds to mental lucidity in old age. Starting musical training early and continuing it for several years have a favorable effect on mental abilities during old age. Musical training also seems to enhance verbal prowess and the general IQ of a person, although it is possible that people with higher IQ tend to pursue music more seriously. It is advisable to think about our lifestyles and change them accordingly to have a better chance at a healthy, clear-headed old age.

For More Information:

[The Relation between Instrumental Musical Activity and Cognitive Aging](#)

Publication Journal: *Neuropsychology*, April 2011

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