

Playing a musical instrument or singing in a choir may boost your brain

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Generations of parents have told their children to practice their musical instruments. Parents have good reason to keep on top of their children's musical education, since learning an instrument is not only associated



with <u>better educational attainment</u> but also <u>cognition (thinking)</u> and even <u>intelligence scores</u> in children. But does this musicality translate to better cognition later in life?

A <u>recent study</u> in the International Journal of Geriatric Psychiatry investigated this question by asking middle-aged and <u>older people</u> to complete a questionnaire on their lifetime <u>musical experience</u> before completing cognitive (thinking) tests. The results showed that musical people had better memory and executive function (the ability to stay focused on tasks, plan and have self-control) than those with less or no musicality.

A good memory is important for playing a musical instrument, such as playing music from memory, and this seems to translate to people's cognitive performance. Similarly, executive function is required when playing an instrument, and this too translated to improved cognitive performance.

This finding was similar, regardless of which instrument people played or the level of musical proficiency people acquired—although most people in the study played an instrument for only a few years of their lives.

What made a difference, however, was whether people still played an instrument or only played in the past, with current amateur musicians showing the highest cognitive performance of participants.

This makes sense as continued engagement in cognitively stimulating activities, such as playing an instrument, should result in continued <u>brain</u> <u>health</u> benefits, whereas having played the recorder for three years at <u>primary school</u> might not have that big an impact on our cognitive performance later in life. But how about being musical without playing an instrument?



Singing is a very popular musical activity as it allows joining musical groups, such as choirs, without the need to learn a musical instrument. But does singing provide the same cognitive benefit as playing an instrument?

According to the study findings, singing can result in better executive function but not memory, suggesting that playing an instrument has additional brain health benefits.

Why singing would help us with our executive function is not clear and requires further investigation. However, singing has a strong social benefit when done in choirs, and there is good evidence that being engaged in <u>social activity</u> is good for our brain health.

The 'Mozart effect'

How about just listening to music? Does it also improve our cognition and potentially brain health?

Many people might remember the famous "Mozart effect," which was based on a study published in *Nature* in 1993 showing that when students were played Mozart, they scored higher on intelligence tests.

This led to a whole industry promising us that playing such music to ourselves or even our babies could lead to cognitive benefits, even though the evidence for the original study is still controversially discussed to this day.

Sadly, the current study found no association between listening to music and cognitive performance. Cognitive stimulation depends on us being actively engaged in activities, so passively listening to music doesn't seem to provide any cognitive benefits.



Playing an instrument or singing seems to have benefits to our brain health in aging, according to the study. What is yet to be established is whether this would also help prevent future cognitive decline or dementia.

The study provides no evidence for this yet and it is also not clear how the findings apply to the general population, since most people in the study were female, well-educated and well-off.

Still, considering the overall cognitive and <u>social benefits</u> of learning an instrument or singing in a choir, it might be worth engaging in such cognitive stimulation as we age. Our parents would be proud of us.

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