

The tuned brain: Enhanced brain plasticity in musicians

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Playing a musical instrument at a professional level is one of the most complex skills a human can achieve and is the result of intense practice started at an early age. It has been shown previously that the musician's brain adapts to this demand by changing its structure in brain areas involved in musical practice, such as the motor cortex. In the present study, we show that long-term musical training also influences the way in which the motor part of the brain regulates its own excitability and changes the strength of synaptic connections. These findings suggest that activity in the motor part of the brain is more precisely "tuned" in professional musicians than in non-musicians, which most likely supports their excellent motor skills.

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