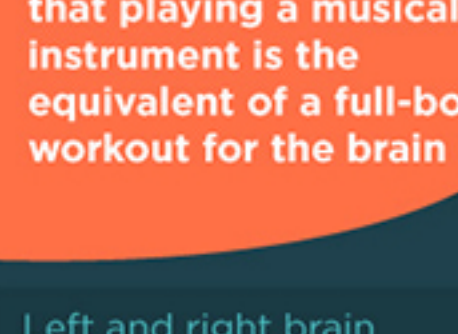


Benefits of PLAYING MUSIC

BENEFITS OF PLAYING A MUSICAL INSTRUMENT

A Musician's Brain is Like an Orchestra



Scientists have found that playing a musical instrument is the equivalent of a full-body workout for the brain

Studies have shown that when we're playing an instrument, different parts of the brain engage in simultaneous processing of a variety of information at an amazing speed

Visual, auditory and motor cortices are especially active

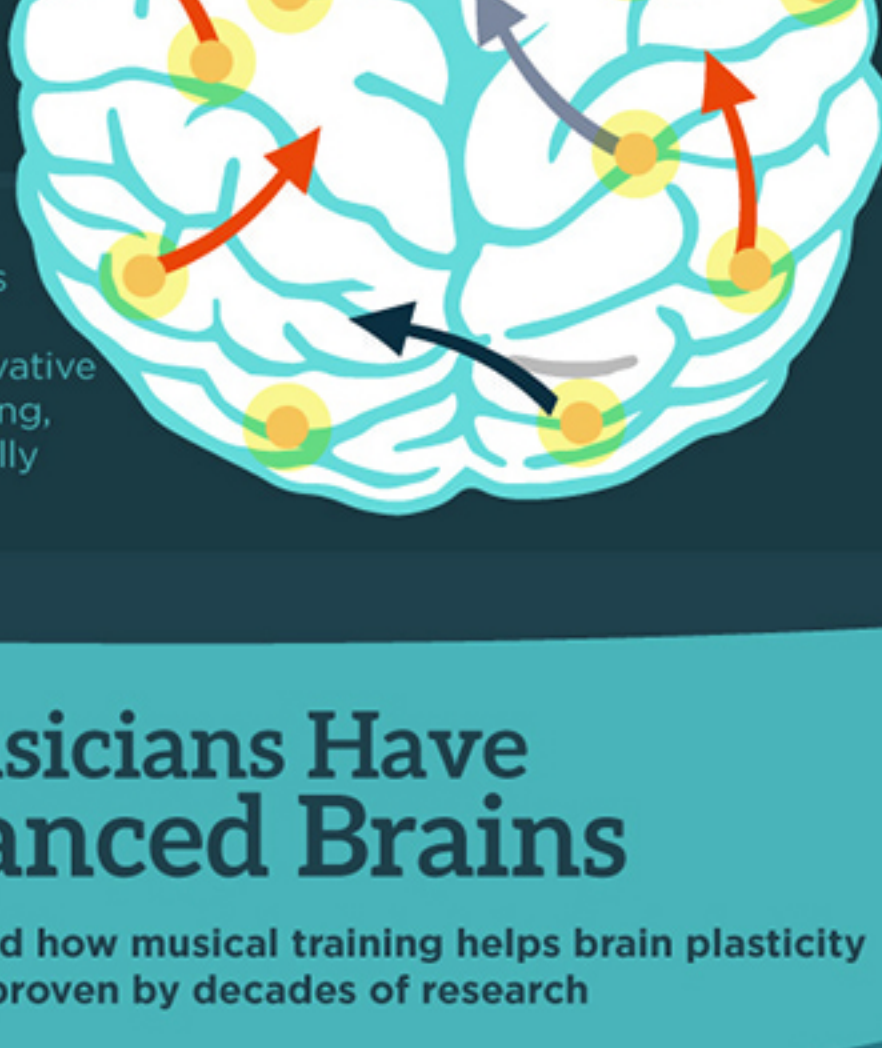
Making music requires and awakens mathematical and linguistic precision

Left and right brain hemispheres are simultaneously stimulated and engaged

Increased volume and activity in the bridge (corpus callosum) between the hemispheres means that the brain can process information faster through diverse pathways because of enhanced connectivity



People who play instruments are extremely effective & innovative in problem solving, both academically and socially



Musicians Have Enhanced Brains

Plasticity of the brain and how musical training helps brain plasticity has been proven by decades of research



The volume of grey matter is greater in adult professional musicians than in people who are not musicians⁽¹⁾

The same study also showed that children's brains structurally change after 15 months of musical training



Other studies have shown a greater volume of white matter in musicians' brains

A Musician's Brain is Different

Studies suggest that musicians have better:

Memory

Understanding of cognitive and emotional aspects of information

Understanding of non-verbal communication

Attention to detail

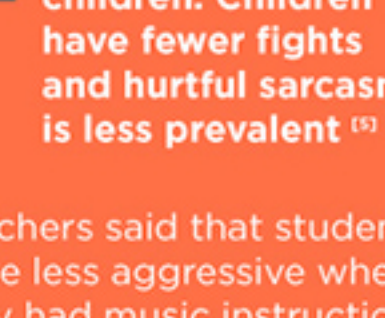
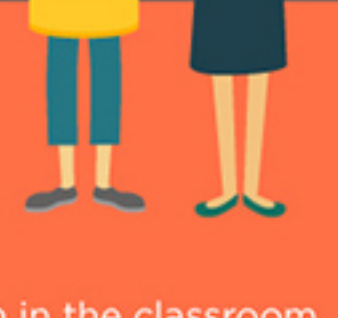
Coordination and dexterity

Planning and strategizing skills

Learning abilities



Music Education & Learning



High school music students earn a higher GPA than non-musicians in the same school⁽²⁾

Music majors scored the highest reading scores⁽³⁾

After taking music lessons from grades 8-12, students of lower socioeconomic status showed improved math, reading & history scores⁽⁴⁾



Music in schools yields a better connection between children. Fewer fights and hurtful sarcasm is less prevalent⁽⁵⁾

Music affects social cohesion in the classroom, greater self-reliance and social adjustment⁽⁷⁾

Teachers said that students were less aggressive when they had music instruction in schools⁽⁶⁾

Music lessons have a long-term effect on the development and improvement of spatial-temporal skills of children (3-4 years old), compared to children who have not received any music lessons in the same timeframe⁽⁸⁾



Children who took piano lessons had better IQ scores than children who took computer lessons, singing lessons or no lessons



Playing music had a positive influence on children with dyslexia and other reading and speech impairments⁽⁹⁾

Music Education & Personal Development

Music students communicate better with their parents and teachers⁽¹⁰⁾

The social benefits increase the level of self-esteem in students

College-age musicians are emotionally healthier

Their anxiety levels and emotional concerns are lower and more rare than in their non-musician peers

Music students are more motivated and efficient⁽¹¹⁾

Making music relieves stress

Playing an instrument requires your full focus and attention and stops stressful thoughts

Music education improves self-image, self-awareness and positive attitude⁽¹²⁾

Students with music education report a greater sense of identity

Accomplishment, appreciation, fun, active participation and maturing relationships are just a few reported benefits of school bands in the USA⁽¹³⁾

Several studies have shown that music education creates connection with like-minded people, sense of contribution and belonging

Creative and social aspects of musical training are important- music skills are not just connected to "formal" education

You learn the value of self-expression

Improves time management skills

Musicians learn early to manage their time effectively
Musicians learn how to be responsible and accountable

Teaches patience

Musical results require a lot of time and effort

Playing music creates a sense of achievement

Music makes you a team player

Writing and creating music with others is a strong social experience

Requires cooperation with other people

Influence of Music Education on Old Age

LEARNING TO PLAY MUSIC KEEPS US SHARPER IN OLD AGE

Playing an instrument before 9 years of age and continuing for the next 10 years or more can affect verbal working memory in later adulthood [14]

In 2011, Henna-Pladdy studied healthy adults who were between 60-83 years old

Those who played an instrument for 10 or more years had highest scores in areas of nonverbal and visuospatial memory, naming objects and taking in and adapting new information

IT'S NEVER TOO LATE TO START MAKING MUSIC

Studies have found that taking piano lessons, even for 6 months, improved memory, verbal fluency and other cognitive functions in adults between the ages of 60-85. This group also showed improved planning abilities and they processed information faster.



Research shows that playing music can have direct physical benefits for older adults- lower blood pressure, lower heart rate, lower levels of stress, anxiety and depression

Music also shows potential in preventing or slowing down development of Alzheimer's disease and dementia