Benefits of Learning and Playing Music for Adults

Our Yamaha Piano School · https://ottawapianos.com/learning-centre/benefits-of-learning-and-playing-music-for-adults/



The reasons for children to take piano lessons have been listed, explored, explained in many articles, but what about adults? Can we still benefit from taking up the piano? The answer, of course, is a resounding YES! Here a just some benefits backed by science. This is a lot of information and we thank the NAMM Foundation for all their research.

Cognitive Benefits/Facts:

- A Stanford study shows that music engages areas of the brain which are involved with paying attention, making predictions and updating events in our memory (Baker, Mitzi. "Music moves brain to pay attention, Stanford study finds." Stanford Medicine. Accessed February 24, 2015).
- Much like expert technical skills, mastery in arts and humanities is closely correlated to a greater understanding of language components (Trei, Lisa. "Musical training helps language processing, studies show." Stanford News. Accessed February 24, 2015).

- Musicians are found to have superior working memory compared to non-musicians (Berti, et al., 2006; Pallesen et al., "Cognitive Control in Auditory Working Memory Is Enhanced in Musicians," PLOS One, June 15, 2010).
- Musical experience strengthens many of the same aspects of brain function that are impaired in individuals with language and learning difficulties, such as the neural timing precision which allows differentiation between speech syllables (Kraus, N. and B. Chandrasekaran, Music training for the development of auditory skills. Nature Reviews Neuroscience, 2010.11: p. 599-605.)
- Both music and language are complex communication systems, in which basic components are combined into high-order structures in accordance with rules. Whether music was an evolutionary precursor to language or merely a byproduct of cognitive faculties that developed to support language, music is pervavise across human cultures and throughout history (Nina Kraus, Jessica Slater, "Music and language: relations and disconnections," The Human Auditory System: Fundamental Organization and Clinical Disorders, Vol. 29, 3rd Series, 2015).
- Adults who receive formal music instruction as children have more robust brainstem responses to sound than peers who never participate in music lessons and that the magnitude of the response correlates with how recently training ceased. These results suggest that neural changes accompanying musical training during childhood are retained in adulthood (Skoe, E. & Kraus, N. 2012. A Little Goes a Long Way: How the Adult Brain Is Shaped by Musical Training in Childhood, Journal of Neuroscience, 32, 34, 11510. DOI: 10.1523/JNEUROSCI.1949-12.2012).
- Researchers found that those who played an instrument for two years showed a stronger "neurophysiological distinction" between certain sounds than children who didn't get the instrumental training. For instance, the music-makers more easily could tell the difference between the words "bill" and "pill," a key skill in learning to read (Skoe, E. & Kraus, N. (2012). A Little Goes a Long Way: How the Adult Brain Is Shaped by Musical Training in Childhood, Journal of Neuroscience, 32, 34, 11510. DOI: 10.1523/JNEUROSCI.1949-12.2012).
- Researchers from Ohio State University's Wexner Medical Center looked at how different types of music and silence were processed in the brains of 21 people with epilepsy. Whether listening to classical music or jazz, all of the participants had much higher levels of brain wave activity when listening to music, the study found. Brain wave activity in the epilepsy patients tended to synchronize more with the music, especially in the temporal lobe, the researchers said (Robert

Preidt, HealthDay, August 10, 2015).

Social Benefits/Facts:

- A review of 23 studies covering almost 1,500 patients found that listening to music reduced heart rate, blood pressure and anxiety in heart disease patients (Bradt & Dileo, "Music for stress and anxiety reduction in coronary heart disease patients," PubMed.Gov, 2009).
- In research by Ferguson and Sheldon (2013), participants who listened to upbeat classical compositions by Aaron Copland, while actively trying to feel happier, felt their moods lift more than those who passively listened to the music. This suggests that engaging with music, rather than allowing it to wash over us, gives the experience extra emotional power (Ferguson and Sheldon, "Trying to be happier really can work: Two experimental studies," The Journal of Positive Psychology: Dedicated to furthering research and promoting good practice, 2013).
- A study by Logeswaran et al. (2009) found that a quick blast of happy music made participants perceive other's faces as happier. The same was true for a snippet of sad music. The biggest effect was seen when people looked at faces with a neutral expression. In other words: people projected the mood of the music they were listening to onto other people's faces (Logeswaran et al., "Crossmodal transfer of emotion by music," Neuroscience Letters, 2009).
- Graduates from music programs report that creativity, teamwork, communication, and critical thinking are skills necessary in their work, regardless of whether they are working in music or other fileds (Craft, A. 2001. An Analysis of Research and Literature on Creativity and Education. Report Prepared for the Qualifications and Curriculum Authority. Coventry, England. Strategic National Arts Alumni Project, SNAAP. 2010. Forks in the Road: The Many Paths of Arts Alumni: Strategic National Arts Alumni Project 2010 Findings. Bloomington, IN).

Health Benefits/Facts:

- A study of healthy male college students found that, while riding stationary bicycles, the participants worked harder while listening to fast music. Extra bonus: They also enjoyed the music more (Scott Christ, "20 surprising, science-backed health benefits of music," USA Today, December 17, 2013).
- One study found that playing soft music (and dimming the lights) during a meal can help people slow down while eating and ultimately consume less food in one sitting (Scott Christ, "20

surprising, science-backed health benefits of music," USA Today, December 17, 2013).

- Listening to classical music has been shown to effectively treat insomnia in college students (Scott Christ, "20 surprising, science-backed health benefits of music," USA Today, December 17, 2013).
- Scientists have found that the emotions patients experience while listening to music have a healthy effect on blood vessel function. Music both made study participants feel happier and resulted in increased blood flow in their blood vessels (Scott Christ, "20 surprising, science-backed health benefits of music," USA Today, December 17, 2013).
- One study found that listening to music after a workout can help the body recover faster. While slow music produced a greater relaxation effect post-exercise, it seems that any kind of music can help the physical recovery process (Scott Christ, "20 surprising, science-backed health benefits of music," USA Today, December 17, 2013).
- Studies show that music can trigger the brain to release chemicals that distract the body from pain. When music reaches the brain’s auditory cortex, there’s communication between the cortex and the brain’s areas that control emotion, memory, and motor control (Abbie Fenress Swanson, "Music helps vets control symptoms of PTSD," Time, March 8, 2010).