Compelling Studies Favoring K-12 Music Education!

Significant Predictor of Higher IQ In Early Adulthood *Study summary published in American Psychological Association (June 2006, Vol. 37, No. 6, Page 13)* as well as *Journal of Educational Psychology (Vol. 98, No. 2)*

In a previous groundbreaking study about the correlation between learning music and intelligent quotient, a researcher had found that six year-olds who had one year of instrumental music study had significantly higher IQs than those who didn't have music lessons. Schellenberg subsequently surveyed college students about their music education backgrounds, and discovered that those who had at least six years of music training (extending back to their K-12 music educations) had IQs greater than those of people who didn't have music backgrounds.

Protective Against Dementia *Study summary published in the International Journal of Alzheimer's Disease, December 2014 – Study Abstract on PubMed*

In one of the most intriguing studies on music education ever conducted, researchers hypothesized that performing a musical instrument could be protective of this horribly degenerative brain disease.

This study analyzes only twins, so the researchers were able to factor out the possibility of favorable genetics as an indication for dementia prevention. The scientists surveyed the musical habits of every single person in each set of twins, (one had already developed dementia) concluding that those who had played a musical instrument into adulthood were 36% less likely to develop dementia.

Improves Emotional Outlook *National Institutes of Health Magnetic Resonance (MRI) Study of Normal Brain Development, January 2015 – Study analysis published on News Everyday*

In a meta-analysis of 232 brain scans of children and adolescents ranging in age from 6 to 18, scientists discovered compelling evidence favoring the support of learning music at a young age. According to University of Vermont psychiatry professor James Hudziak, the brain scans revealed that the more a child was trained on a specific instrument, the better the child's emotional outlook, anxiety control, and attention to detail. One key factor noted was "cortical thickening" on certain areas of the brains of musicians. James Hudziak's previous research, according to the article, demonstrated corollaries between cortical thickening and positive effects in the brain with depression, attention, and more. His reasoning behind the results of his research are simple – similar to a weightlifter who gains muscle with resistance training, playing a musical instrument similarly "trains" the brain, ultimately making critical areas of the brain affecting emotional outlook and anxiety control thicker.

It Makes Your GPA Better *Study findings published in The Untapped Power of Music: Its Role in the Curriculum and its Effect on Academic Achievement (Joyce Kelstrom, April 1998, NASSP Bulletin, Vol. 82 No. 97, Pages 34-43) – Summary of main points covered on kon.org*

According to an intriguing article published in 1998 by Joyce Kelstrom, researchers found that music students had higher achievement in academic subjects outside of music than non-music students. The College Entrance Examination Board has found that high school students with a

background in music perform better on standardized test scores than those without. Additionally, students who participated in band and orchestra ensembles were found to have better overall GPAs than students who did not participate in those ensembles.

Develops Superior Reading Ability *Meta-analysis published in Applications of Research in Music Education (November 2008, Vol. 27, No. 1 Pages 17-32) – Article by Jayne M. Standley*

A meta-analysis of 30 studies published in 2008 revealed music education considerably elevates reading ability in children. This may be that learning music helps children better understand phonetic patterns and how different alphabetic letters sound when blended together. The correlation between learning the sounds of music and learning the sounds of the alphabet may not be so different.

Besides this, the one universal constant in all of music is that music is based in rhythm. Talking and reading in our heads and aloud is an incredibly rhythmic activity that requires an intuitive understanding of rest at commas, cadences at the end of phrases, timed dynamics in the presence of exclamation marks, and even pitch elevations at the ends of questions.

Sharpens Cognitive Function

Study summary published in The Atlantic

In a relatively recent article published in *The Atlantic,* the author highlights researchers from Northwestern University who spend time with at-risk youth in Los Angeles participating in musical activities at least 5 hours a week. The goal behind the research is to see how these music lessons impact the cognitive and language skills of these children. This is what the article states of the scientific conclusions: “What they are finding, according to Dr. Nina Kraus, a professor and neuroscientist at Northwestern and lead researcher of the study, is that music instruction not only improves children’s communication skills, attention, and memory, but that it may even close the academic gap between rich and poor students.”

Linked to Greater Likelihood of Graduation *Study/survey disclosed in a report by Harris Interactive titled Understanding the Linkages Between Music Education and Educational Outcomes(July 2006)*

In a survey conducted in 2006, researchers at Harris Interactive found that high schools with a music program had a 90%+ graduation rate of students. Contrastingly, high schools without a music program had a graduation rate of less than 73%.

Promotes Motor Task Competency *Study summary published on PBS.org*

In a study led by Boston College psychology professor Ellen Winner as well as neurology professor Gottfried Schlaug of Harvard University, children who experienced 15 months of weekly musical instruction showed improved ability in discrimination of disparate sounds as well as in performing motor tasks, which are voluntary movements relating to muscles. Brain scans of these children also showed remarkable development in neural pathways associated with motor task competency. Music is a fine physical art involving careful detail of muscular precision and performance.