

According to news website Science Daily, a new Northwestern University study is the “first to provide concrete evidence that playing a musical instrument significantly enhances the brainstem’s sensitivity to speech sounds. This finding has broad implications because it applies to sound encoding skills involved not only in music but also in language.”

Science Daily. (2007). Music training ‘tunes’ human auditory system. Retrieved April 9, 2007 from <http://www.sciencedaily.com/releases/2007/03/070312152003.htm>

A Harvard-based study has found that children who study a musical instrument for at least three years outperform children with no instrumental training – not only in tests of auditory discrimination and finger dexterity (skills honed by the study of a musical instrument), but also on tests measuring verbal ability and visual pattern completion (skills not normally associated with music). The study, published October 29, 2008 in the online, open-access journal.

PLOS ONE – Publishing science, accelerating research; Published: October 29, 2008; Marie Forgeard, Andrea Norton, and Gottfried Schlaug, Ellen Winner

Music participation, defined as music lessons taken in or out of school and parents attending concerts with their children, has a positive effect on reading and mathematic achievement in early childhood and adolescence. Darby E. Southgate and Vincent Roscigno of Ohio State University reviewed two nationally representative data sources to analyze patterns of music involvement and possible effects on mathematics and reading performance for both elementary and high school students. Music is also positively associated with academic achievement in the study, particularly during the high school years.

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The relationship between participation and achievement in music and achievement in, Math, English and Biology were investigated using data from standardized testing in those subject areas. Conducted over three consecutive years, music participation was correlated with higher academic achievement, particularly in Math and Science. This study, conducted by Peter Gouzouasis and the University of British Columbia, supports the view that music participation encourages academic merit in Math, English, and Science.

Gouzouasis, P. (2006). The relationship between achievement and participation in music. University of British Columbia.