

Music training increases phonological awareness and reading skills in developmental dyslexia: an open randomized controlled trial

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While children with dyslexia show deficits in temporal processing, both in language and in music, musical activity increases phonological awareness, word segmentation, working memory, as well as reading abilities in children with typical development. Within this framework, we tested the hypothesis that music training, by improving temporal processing and rhythm abilities, improves phonological awareness and reading skills in children with dyslexia. The study is a prospective, multicenter, open randomized controlled trial, consisting of test, rehabilitation and re-test (ID NCT02316873). After rehabilitation, the music group (N=24) performed better than the control group (N=22) in tasks assessing rhythmic abilities, phonological awareness and reading skills. This is the first randomized control trial testing the effect of music training in enhancing phonological and reading abilities in children with dyslexia. The findings show that music training can modify reading and phonological abilities even when these skills are severely impaired. Through the enhancement of temporal processing and rhythmic skills, music might become an important tool in both remediation and early intervention programs

Presented at the The Neurosciences and Music – V Cognitive Stimulation and Rehabilitation, Dijon, France 29 May – 1 June, 2014