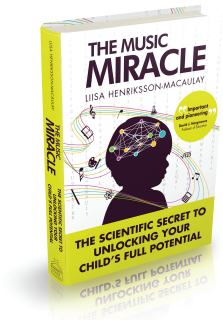
three essential music skills that unlock your child's full potential

Liisa Henriksson-Macaulay,

Founder of Moosicology, Author of The Music Miracle: The Scientific Secret to Unlocking Your Child's Full Potential

Praise for The Music Miracle: The Scientific Secret to Unlocking Your Child's Full Potential



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"Never before have I seen such a comprehensive and in-depth review of the neuroscientific and psychological basis of the effects of music on young children. Parents and many others will be anxious to read it because of its very important message. Liisa Henriksson-Macaulay has blazed an important and pioneering trail for others to follow, and I wish this book every success."

Psychologist FBPsS, Professor of Education David J. Hargreaves, University of Roehampton

"Henriksson-Macaulay's book bursts with enthusiasm and a fantastic array of knowledge and suggested approaches for fostering the musical development of children. Her commitment to this cause never flounders. I applaud her."

Lucy Green, Professor of Music Education, University of London

"I am pleased to commend this is a very positive contribution to the public awareness of the power of music to transform children's lives. Every child is musical. By encouraging their children to make the most of their innate musical potential, parents can support much wider cognitive, emotional and social development as their children grow. Liisa Henriksson-Macaulay's narrative is engaging and full of rich personal anecdote, as well as a synthesis of key research findings and useful examples for parents of how music can be used successfully to nurture and strengthen children's development."

Professor Graham Welch, University of London

chapter 1 - Rhythm training for the brain - How keeping the beat makes your child more intelligent (and better-behaved!)

your child is born with rhythm

You often hear people claiming that they "haven't got any rhythm" or "cannot keep a beat". Even if this was the case, they have not been born that way. In 2009, brain imaging studies discovered that the brains of newborn babies detect the beat in music. [1] Now we know that rhythm is something all humans are born with - including your child.

steady beat: steady foundation for school success

If someone 'cannot hold a beat', they simply lack in practice. What is even more interesting is that rhythmic ability is not just for those aspiring to follow in Michael Jackson's dancing footsteps. Instead, rather surprisingly, rhythm skills help your child learn more easily and achieve higher grades at school!

A longitudinal study published in 2010 found that the better children are at hand-clapping songs in kindergarten, the better they do at school in the years to come. [2] The children who had the highest levels of hand-clapping skills in preschool became the most efficient pupils upon entering school. This effect extended from higher grades to abilities such as verbal memory and handwriting as well as mathematical skills. [3]

The study also found that music appreciation classes - alike to the standard music classes given at school - did not help children boost their rhythm skills nor their school success. What children need is training in basic rhythm skills. The researchers note that children spontaneously engage in handclapping, but to maximize your child's school success they need to be encouraged to practice their core rhythmic skills. [4]

rhythm makes children move

The good news is that just as we're all born with the understanding of rhythm, we're also given the gift for moving to the beat at birth. Recent scientific studies have found that listening to music with a rhythmic beat (such as popular music where drums are commonly used) activates the movement-related regions in the brain. [5] In other words, music is made to make us move.

Evidence from studies shows that babies are, in the scientists' words, "born to dance" - even the smallest of babies naturally try and match their movements with the beat of the music they hear. [6] And the better the babies are at matching the beat of the music, the more they smile. [7]

Your baby is waiting to become a rhythm master. It is only with external restrictions that many of us grow out of this natural tendency - or more accurately, learn to suppress it. Jigging along to music is something that babies do naturally, yet it does not take many years until children often get told off for the same behaviour and to sit still instead. It is important that you offer your child a rhythmic outlet, as this is something that most schools do not yet invest in, despite the growing amount of research showing its significance.

chapter 1 - Rhythm training for the brain - How keeping beat makes your child more intelligent (and better-behaved!)

the surprising link between rhythm skills and iq

But why would natural selection have favoured us to have a feel for moving to the beat at birth? An interesting explanation comes from the study of intelligence. This field of study has uncovered a link between a person's intelligence and their timekeeping skills since 2007, when the scientists first noticed that the better a person did at rhythmic tests, the higher their IQ was. The fundamental IQ-related skill was found to be that of holding a steady beat with hand movements. [8] Since then, the same result has been confirmed in numerous studies. [9]

All music learning before the age of eight increases a person's full-scale IQ, as leading researcher Glenn Schellenberg found in his wealth of studies since 2004.[10] But what the veteran researcher Francis Rauscher discovered in 2011 was that the instrumentalists who outdid all other players when it came to IQ-linked concepts such as mathematics and reasoning skills. were the young drummers. [11]

avoid learning deficits and toddler tantrums

Thus, by allowing your child to learn simple handclapping skills and by teaching them to move accurately to the beat of a song, you are boosting their full-scale intelligence and future school success. Conversely, inadequate rhythm skills have been found to cause learning disabilities such as dyslexia and dyscalculia.[12]

The skill of the beat is no small feat - it helps you make life easier for your child and for yourself, as not many things are quite as stressful for a parent than learning difficulties and failure at school.

An additional benefit for parents of toddlers and preschoolers is that the more your child learns to follow rhythm, the more patient they are, as well as less prone to tantrums! [13]

get happy, clapping

A simple way is to start by clapping along to songs you listen to, and encouraging your child to do the same. Choose a song and try to clap on every beat, recognizing the pattern in them. For instance, most songs are in 4/4, also called common time, and the pattern is the repetition of four beats. Each unit of 1-2-3-4 is called a bar. Another common time signature is 3/4, where the bar consists of a repetition of three crotchets instead of four.

Do you know your crotchets from your quavers and the difference between 4/4, 3/4 and shuffle beat? Moosicology is the complete introduction to the core skills and concepts of music that children from 0-7 can learn (and often, their parents do too)! Moosicology works even without parental assistance: the characters, activation tracks and groovy songs do the teaching.

Order the Complete Moosicology Package at Moosicology.com and start your child's rhythm training today.

chapter 1 - Rhythm training for the brain - How keeping beat makes your child more intelligent (and better-behaved!)

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chapter II - Ear for melody: The secret behind reading

Just as with rhythm, many people claim 'they cannot hold a tune to save their lives. And just as with rhythm, recent scientific advancements have made the opposite discovery. Newborn babies are born with the essential prerequisite for singing: they recognise whether a sample of notes is in tune or out of tune. [1]

Furthermore, did you know that babies prefer to listen to singing rather than speech? [2] This explains why singing to a baby is the best way to calm them down when they're upset - with a 94,5% success rate! [3] (Note from the author: I wish this information had been published when our baby son was colicky in the middle of the night and the last thing I felt like doing was singing.)

musical restriction and the pressure to be in tune

Nobody is born tone-deaf, except in the very rare case of a developmental disability called amusia. A more common phenomenon is what is called "musical restriction", which comes from being belittled as a child for performing musically. [4] If a child gets to hear that they "cannot sing in tune", they can commonly take on board this belief - and the shame attached to it.

Extensive studies made on musically restricted adults have found that not only did they lack a musically supportive environment in their childhood years they, even as adults, they continue to suffer from the shame of "not being musical", suffering more anxiety and withdrawal than persons with a healthy musical upbringing. [5] Of course, they were musical; everyone is, except those with amusia. Just as all developmentally normal children can learn to talk, they can also learn to sing. As Professor Graham Welch from the University of London famously stated: "We are all musical – we just need the opportunity." [6]

don't label, enable!

Most children only learn to sing in tune after the age of five when their vocal cord physiology has developed sufficiently. [7] However, even babies attempt to sing, and many toddlers are already keen singers. [8] It is sadly not uncommon that parents label their children "tone-deaf" when they are just a toddler or at the age of two or three, way before it is even physiologically possible for them to produce correct pitches. This way the child stops singing before they even can, and never get to develop what would have been a perfectly healthy singing voice. In the meantime, ear training is essential to ensure your child's future singing ability.

the key that unlocks reading skills

As with rhythm, melodic abilities are beneficial for all children - not just for the future Whitney Houstons and Mariah Careys.

Numerous studies have found that the better your child gets at recognising pitches, the more easily they develop reading skills, and the better their reading skills remain. [9]

The fascinating fact is that the musical abilities of your child directly correlate with their reading and writing abilities. [10] This is because learning to read consists of hearing the smallest units of spoken language - these sounds are called phonemes, and the ability to hear phonemes correctly is what makes for reading skills. [11]

chapter II - Ear for melody: The secret behind reading

Contrary to common belief, rhymes do not teach phonemes or reading ability - only the activities that target precise listening do.[12] And the proven ways to boost phoneme skills are through the teaching of phonics and the teaching of music.

music training is even more solid training for reading than phonics

The phonetic abilities of nursery-aged children have been found to reliably predict their reading success far into the future.[13] Research in phonetics, in turn, has discovered since 2003 that a test of musical ability predicts a person's phonetic abilities - crucial for the phonics component of early reading skills - better than a test on spoken phonetics abilities! [14]

This is because music learning is found to be the "ear fitness training" for the brain,[15] developing overall listening skills that extend from reading to better study skills,[16] better memory[17] and even a higher level of emotional intelligence.[18]

For the same reason, the better music skills your child gains, the wider their vocabulary gets.[19] Your child's melodic abilities make them better at recognising new words and memorising them. [20] Music training has even been shown to boost children's verbal intelligence [21] as well as their understanding of both semantics [22] (the meaning of language) and syntax [23] (the structure of language).

Thus, mastering melodies makes your child a wordsmith. You can let your child shine with the love of music with the help of Moosicology, the first and only musical compilation that teaches music through music. Your child will learn key melodic concepts from songs that they love, and no previous musical experience is needed in using the Moosicology Package. Moosicology is sold exclusively at moosicology.com.

chapter II – Ear for melody: The secret behind reading

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For more studies, see Henriksson-Macaulay, L. (2013). The Music Miracle: The Scientific Secret to Unlocking Your Child's Full Potential. United Kingdom: Earnest House Publishing.

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chapter III - Notation - how reading music helps academic skills

Studies show that the learning of musical notes is good for school success, especially in mathematics. Martin Gardiner and his research group took a large group of children who were lagging behind in maths, and taught them music skills. In less than a year, these children overtook the other students who previously had been ahead in maths.[1] An analysis of the study results showed that the most important ingredient in the maths boost had been note reading.[2]

But why does music reading provide a boost for maths? Research has established that the better visual-motor coordination a child has, the better mathematical skills they have.[3] Music learning is the best way to boost visual-motor coordination, as clapping and singing from notes trains your child to turn visual stimulus into actions.[4] If you want your child to understand mathematics and learn it more easily, making music from notes is the way forward.

reading music boosts reading skills

Learning notes needn't be a chore. In fact, learning to read music can be much easier than learning to read, as music only contains 12 notes. In contrast, the English language contains 44 phonemes! It could be said that learning to read music should be almost four times easier than learning to read text. The biggest irony is that by learning to play music (from notes and by ear), children learn to read much earlier, more easily and better than their peers who miss out on learning music. This has been reliably shown in studies over the past 10 years.[5]

Many school teachers do not read music themselves, and herein lies the problem. The lack of musical learning in childhood is a vicious circle that repeats itself over generations - until somebody takes action to stop it. The best we can do as parents is to ensure that our children get to develop their outstanding capabilities in all areas of life, through the early learning of music which is the all-round brain booster. If children who lag behind in maths can suddenly catch up and even overtake the more successful pupils with less than a year of modest yet regular music training, this shows that all children have an amazing capability for maths (and science, and reading...) when they simply get the right training. Make sure your child gets to unlock their full potential!

Do you know your notes? Come aboard our note trains and read music like never before with Moosicology. Give your child an introduction to note recognition and music reading in a way that is appealing and logical for the child to understand. No previous musical experience is needed - the characters, songs and visual learning aids do all the teaching for your child (and you!). Simply grab your own package from moosicology.com with the price of just one private music lesson. Your child will enjoy the package for years - and benefit from the gift of music for life.

chapter III - Notation - how reading music helps academic skills

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