The Amazing Benefits of Music for Kids ~ Lauren Slater

The best reason to make melody a part of your child's life, plus fun music games for kids of every age!

Victor Coelho, a carpenter, best remusic therapymembers this about his daughter Lily at age 1: a night in Boston, where they live, sitting on the big bed. Coelho's wife was at her chef job. Lily was sleeping in his arms as he watched TV. Onto the screen came a bongo band. Lily opened her eyes and turned her head toward the television. She raised her right hand, then her left, and began to clap to the sound. "She was riveted," says Coelho. "She started making these really graceful arm movements, something I had never seen from her before. I called my wife and told her about it, and said, 'Lily loves music!'" Just like her mom and dad.

Children hear music during the second trimester in utero. From then on, when they're not much bigger than a plum, they're aware of the watery paddle of Mom's heart, the whoosh of blood filtered through the placenta. Sound begins to work on the fetal brain as surely as estrogen and progesterone do.

Music — whether it's prenatally, in infancy, or throughout childhood — helps neurons in our brains form connections that may help us understand language; in adults, music can lower blood pressure and help regulate heart rate. Some hospitals play music for preemies in the neonatal intensive care unit. Researchers have discovered that such music — or even just Mom humming — may help babies gain weight faster and leave the preemie ward earlier.

"There's an undeniable biology of music," says Harvard University medical neurobiologist Mark Tramo, M.D. "In our brains, millions of neurons form circuits, or networks, that are uniquely activated when we listen to music. These neurons are spread out in many regions of the brain, including the auditory centers in both the right and the left hemispheres. These circuits may also be involved in memory, attention, emotion, motor control, and language." There's no doubt that music is a workout for the gray paste between our ears.

But how much can music really boost growing brains? In a study at the University of California, Irvine, three groups of second-graders (30 kids each) were compared: One group received piano lessons and math software to play with, another received language instruction on the computer and played with math software, and the third group got no instruction or software. At the end of four months, the first group performed better on tests of proportional math and fractions than either of the other groups. "Piano is thought to enhance the brain's hardwiring for spatial-temporal reasoning," says Gordon Shaw, Ph.D., professor emeritus of physics, who conducted the research. "Music involves ratios, fractions, proportions, and thinking in time and space."

Victor Coelho and his wife, Corinna Mozo, knew very little about this research. They'd heard of expectant mothers putting on Mozart CDs and vaguely remembered some study, done years ago, that showed adults who listened to Mozart performed better on puzzle tests, but they hadn't paid much attention. It all sounded silly to them, and in a way they were right. In experiments, the much-touted Mozart effect lasts for very brief periods of time. Newer research, however, suggests that music lessons do in fact have longer-term effects on mental agility. "The kids who played the piano were more able to think ahead," says Shaw. "They leaped several steps forward on problems in their heads."

After the night they listened to the bongos, Coelho bought Lily what he thought she'd love — a tambourine and maracas that sound like rain when you shake them. She took to them instantly, spending hours experimenting with the sounds she could make.

Lily is 5 now; she has become a chatterbox with a huge vocabulary. She has memorized Dr. Seuss books and loves to work with her father in his shop, putting together boxes and holding toy tools. If you give her a puzzle, she very quickly finds where the pieces go.

Some researchers might say that Lily's abilities came about in part because of her exposure to music — all those patterns and toe-tapping sounds enriched her neural endowment. It could be true. It could also be true, though, that Lily inherited her love of music, and her capacities, from her mom and dad. Who's to say? Did music make her smart, did her smarts involve a knack for music, or was it something in between, a dynamic push-pull?

Sound Advice

There's no time or place we know of in human history without evidence of music. Some scientists believe that music existed among people before language did. Whether, in the end, music makes us smart, or smarter, may not be the point. What may be the point: We need music it's food for thought.

"I've looked at the research, and there's very little support for music increasing math skills, language skills, or overall academic achievement," says Robert Cutietta, Ph.D., author of *Raising Musical Kids*. Cutietta, who's nonetheless passionate about the importance of music, explains Shaw's findings as correlational, not causal. "Kids who learn to play an instrument like the piano, and who practice, learn motivation and discipline, the things you need to succeed. That's why they may score better on certain tests," he says.

"Still, we need music, not because it will improve us," he says, "but because it's a part of who we are, a part of our human cultural heritage." Music as pleasure, as portal to grace; music as spirit, not brain. Anyone who's ever heard the rising of Beethoven's Fifth, or the way a song by Cyndi Lauper can bring you back to the melancholy of sixth grade, the sound dissolving time — anyone who's ever felt music transport her this way would agree. Whether or not music makes us smarter, without a doubt it lends a certain light to the landscape of our lives, our children's lives.

"I didn't introduce my son to music because I wanted to improve his academic acumen," says Karen Hurwitz of Cambridge, Massachusetts, mom of 5year-old Isaac. "I did it because music is an integral part of our Jewish culture, and I wanted him to know the Sabbath melodies and the folk songs. Plus, I wanted him to have an outlet for his energy."

Isaac is a high-spirited little boy, and as his mother and I speak, he's busy in a corner of the living room using a keyboard and a pair of bongo drums, grinning as the deep beats echo in the room. "Before we gave Isaac the means to make music, he would hit and kick. His teachers at preschool told me he had a problem managing his impulses. Now I tell him to make his anger into sound, and he does, with the drums. I suggest he make his cheerfulness into sound, happy sounds, and he does, with the triangle. Music helped him direct emotions, name them, and control them."

Here's an example of music for the sake of itself, and not for some test. Whether,

ultimately, you make music a part of your child's life because you believe that a little melody may bring your child closer to the fast track or because you want to engage her heart and mind, the results will probably be the same. Your child will learn about the world by mastering a small, specific piece of it. She'll learn about the rhythms that tether us to our days, and about scales that bring us up into the highest region where sound turns into silence, and down into the low place we call sadness. With music, your child will learn how to use her voice.