

Music Together LLC Princeton NJ USA www.musictogether.com (800) 728-2692

# **Current Research Areas in Music**

Compiled by Music Together's Research Team

While we know music is a powerful tool that supports many other types of learning and development, we at Music Together also recognize the great value of music for its own sake. Our primary goal is to help young children achieve basic tonal and rhythmic competence and open the door to a lifetime of joyful music participation. But there's so much more. As part of their work in keeping up with current trends in the field of music and early education, our researchers stay abreast of music-related research. Check out the information below to learn more. If you have any questions, please email research@musictogether.com.

#### Music and Brain Development

Advancements in brain research are revealing many interesting ways in which *active* music participation can help to strengthen neural connections and develop important areas in the brain, especially in early childhood when the brain is rapidly developing from experience.

Some further reading:

http://www.soc.northwestern.edu/brainvolts/documents/Strait etal DCN 2013.pdf

#### Music and Language Development

Many songs support emergent language and literacy development through exposing children to the basic structure and sequence of sounds involved in language, including phonological awareness and alliteration and supporting children's developing narrative skills, breath awareness, vocabulary, and active listening skills.

Some further reading:

http://www.soc.northwestern.edu/brainvolts/documents/Tierney Kraus Chapter 2014.pdf http://www.psychology.mcmaster.ca/ljt/anvari et al 2002.pdf

# Music and Social-Emotional Development

Music activities can foster children's self-regulation, social competence, self-confidence and the ability to work with others in a group through providing young children with leadership opportunities, practice with turn-taking and behavioral control, and allowing for self-expression.

Some further reading:

http://www.psmag.com/news/do-re-mi-promotes-a-feeling-of-we-19058/http://www.psychology.mcmaster.ca/ljt/GerryUnrauTrainor 2012.pdf

## Music and Cognitive Development

Songs and rhythmic chants in varied meters can familiarize children with concepts of proportions, patterning, and counting, supporting their emerging math skills. Music and movement activities can also support children's developing representational abilities and concept knowledge, and provide opportunities to explore cause-and-effect.

#### Music and Executive Functions

Executive functions are cognitive skills that help children organize their thinking and behavior, helping them to solve problems, figure things out, and achieve a goal. Music activities can support executive skill development, including inhibitory control, working memory, and cognitive flexibility.

Some further reading:

http://www.artsedsearch.org/summaries/short-term-music-training-enhances-verbal-intelligence-and-executive-function

#### Music and Physical Development

Range of small, large, locomotor and non-locomotor movement to music can naturally, and deeply, support children's development of body awareness, body control and coordination, spatial awareness, and fine, gross, sensory, and oral motor skills.

#### Music and Approaches to Learning

Approaches to Learning encompass not what children learn but *how* they learn—their learning styles, attitudes, habits, imaginative capacity, motivation to learn, and openness to new tasks and challenges.

#### Music and Health and Healing

Recent research using music in the fields of medicine and psychology highlight the potential "healing" power of music through the ways in which music can promote relaxation, reduce anxiety and depression, and lift one's spirits.

# Music and Parenting

Adult-child music interactions can support positive parenting practices and parent-child interactions, particularly in the earliest years when a child relies on his or her adult attachment figure to learn about the surrounding world, gain self-regulatory skills, and begin language development.

## Music and Special Needs

Because of music's inherent qualities of melody, harmony, rhythm, and timbre (tone quality), many children find music experiences to be energizing and motivating. In addition to the ability to engage children with many different kinds of disabilities and challenges, music also serves as an equalizer – there are no wrong notes or rhythms when the music-making is process- rather than product-oriented.

#### Benefits of Group Music Making

Recent research has revealed that shared music-making can activate and synchronize similar neural connections in participants, resulting in feelings of togetherness and shared purpose, fostering positive social interactions and increased empathy between the adults. Even in infancy, adult-child music and movement interactions can lead to increased coordination and connection, both rhythmically and emotionally, between adult and child.

#### Music and Aging

Singing familiar songs is also incredibly beneficial for elders with any type of memory loss. Neuroscience researchers and music therapists have long studied the role that music plays in the health and aging experiences of seniors suffering from memory and thought-processing issues, particularly associated with Alzheimer's disease or dementia. (See also <u>Generations Classes</u>.)

Some further reading:

http://www.nydailynews.com/life-style/health/film-music-power-alzheimer-patients-article-1.1580719

http://www.sciencedaily.com/releases/2009/02/090223221230.htm http://www.huffingtonpost.com/rita-altman-rn/music-and-memory\_b\_3639805.html