

Music Therapy Science

Cognitive

- executive functioning
- reasoning and problem solving
- learning and spatial memory

Social-Emotional & Behavioral

- processing of social and emotional info and memory
- emotion and reward-based learning
- socially appropriate behaviors

Motor

- voluntary movement
- motor control
- coordination, balance and motor memory

Speech/Language

- complex language functions
- speech production
- speech comprehension

Sensory

- hearing, sight, touch and other sensations
- sensory input
- vital body functions



*Exceptional music therapy services for
children and adults with developmental
and neurological challenges*

(719) 213-4330



Science



Creativity



Compassion

www.NeuroRhythm.com/Science

NeuroRhythm specializes in **developmental and neurological** challenges including **autism spectrum disorder** and other **cognitive, speech/language and motor delays**. We are a research-based behavioral music therapy practice, and the **only** company that integrates the scientific fields of **Neurologic Music Therapy (NMT)** with **Applied Behavior Analysis (ABA)**.

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What is Music Therapy?

Music therapy is an established allied healthcare profession in which music is used within a therapeutic relationship by a **Board Certified Music Therapist (MT-BC)** to address the **physical, cognitive, communication, social and emotional** needs of individuals of all ages.

Neurologic Music Therapy (NMT) is the therapeutic use of music to address the **cognitive, speech/language, and sensorimotor** function of individuals with neurological diseases or disorders. Treatment techniques are **based on a neuroscience model** and the influence of music on functional changes in the **brain and behavior**.

Music Therapy and the Brain

- 🎵 **Music is processed in all areas of the brain** and has the ability to access and stimulate areas of the brain that may not be accessible through other modalities.
- 🎵 Research shows that **music enhances and optimizes the brain**, providing **more efficient therapy**.
- 🎵 Research supports parallels between non-musical functioning and music-assisted tasks, which provides a **scientific rationale** for the use of music in therapy.
- 🎵 Music improves performance of cognitive, motor, and speech/language tasks. Studies show that people perform these tasks better with music than without.