Music Therapy in New Jersey Neurodevelopment



Neurological differences in development can manifest in many areas, such as behavioral, cognitive, physical, emotional, and social skills. In fact, it is common that someone with neurodevelopmental needs experiences these in more than one area at the same time; but these needs cannot be generalized.

Music therapy can utilize its unique approach to address:

- -individualized goals tailored to what is beneficial for each person;
- -needs in more than one area at the same time:
- -individualized goals in both group and individual sessions;
- -different levels of need for the individual at any given time neurological function rather than just symptomatic behavior;
- -development in communication and sensorimotor skills;
- -all needs in the least restrictive environment; and
- -need for skills that extend beyond therapy to everyday life.

How do music therapists use music to achieve these benefits?

- -evoking all the senses through music in a multi-modal approach;
- -addressing behavioral needs, providing reassurance, and maintaining structure, due to the inherent order of music;
- -aiding in communication both verbal and non-verbal;
- -activating response or alternatively providing relaxation;
- -stimulating cognitive functioning in both hemispheres to remediate speech/language skills and help to regulate responses initiated in the brain;
- -facilitating easy access to music in many forms;
- -motivating participation and interactions; and
- -adapting to whichever methodology is best for the client, thus truly making music therapy an encompassing approach.



What is the research behind using music therapy?

Researchers and several organizations perform meta, or combined studies comparison reviews involving music therapy research in order to evaluate the efficacy of music therapy. The results of high-quality systematic reviews and meta- analyses are considered to be more definitive than individual studies in determining efficacy. Cochrane Reviews are considered by many to be the "Gold Standard", or the authoritative word in the medical conversation on a particular topic.

2022 Cochrane Review - Updated

This updated Cochrane review (Geretsegger et al., 2022) included 16 new studies and 1165 participants. The reviewers examined short and medium-term effects of music therapy for people with varying severity levels of autism. Most studies were of children aged 2-12 with a few studies for adolescents and young adults. The conclusions reached were:

The findings of this updated review provide evidence that music therapy is probably associated with an increased chance of global improvement for autistic people, likely helps them to improve total autism severity and quality of life, and probably does not increase adverse events immediately after the intervention. The certainty of the evidence was rated as 'moderate' for these four outcomes, meaning that we are moderately confident in the effect estimate. No clear evidence of a difference was found for social interaction, nonverbal communication, and verbal communication measured immediately post-intervention.... Compared with earlier versions of this review, the new studies included in this update helped to increase the certainty and applicability of this review's findings through larger sample sizes, extended age groups, longer periods of intervention and inclusion of follow-up assessments, and by predominantly using validated scales measuring generalised behaviour (i.e. behaviour outside of the therapy context)....

2022 Cochrane Reviews - Updated

This review (Gassner et al., 2022), updated five Cochrane reviews in the use of music therapy in multiple clinical areas: autism spectrum disorder (ASD), dementia, depression, insomnia, and schizophrenia. For ASD the authors found supporting evidence for the original Cochrane review findings of improved quality of life, social functioning, and global/mental state, plus the updated review found improved behavior, social communication, brain connectivity and parent-child relationship. The authors offered a conclusion for all updated clinical areas:

Recent findings indicate that music therapy helps patients diagnosed with ASD, dementia, depression, insomnia and schizophrenia. Based on current evidence, music therapy is a safe and low-threshold method leading to improvements in terms of physical, psychological and social aspects, though not in all of the outcomes measured. Music therapy can be seen as a non-pharmaceutical alternative and complement to other disease-specific therapies. The update search showed that for active music therapy methods, qualified and (where applicable) accredited music therapists are essential for providing music therapy sessions. For receptive approaches, also nurses and other health professionals trained in applying them are capable of providing music

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interventions leading to patient-related improvements. No general recommendation for active, receptive or mixed forms of music therapy can be given: music therapy methods vary, depending on the patient group.

The studies show that even short trials, i.e. 6 days, with low frequencies (30 min per session), yielded patient-related improvements. In the trials identified for the update, long-term effects extending over more than 6 months have received limited attention. High-quality research on long-term effects, intensity of music therapy and long-term follow-up assessments are needed.

2020 National Clearinghouse on Autism Evidence and Practice

A 2020 report from the "National Clearinghouse on Autism Evidence and Practice" lists music therapy as evidence-based practice for children (ages 0-14) under music-mediated interventions. This is important for children seeking music therapy on their IEP. Pages 92-93 display the Music-Mediated Intervention (MMI) outcome areas and research articles meeting the inclusion criteria of this systematic review. Full Report.

2016 Wisconsin Department of Health

Music Therapy retains an efficacy rating of Level 3 - Emerging evidence (promising as a proven & effective treatment). Review history (October 2016) In the case of Music Therapy. Click here for the review.

2015 National Standards Project Phase 2

The National Standards Project – Phase 1 and Phase 2 – answers one of the most pressing public health questions of our time — how do we effectively treat individuals with autism spectrum disorder (ASD)? The project's primary goal is to provide critical information about which interventions have been shown to be effective for individuals with ASD. Phase 2 report.

In Phase 2 an update is provided for those under age 22 and also includes studies evaluating interventions for adults (22+). "Using music as part of language training" is listed as an established intervention and "Music Therapy" is listed as an emerging intervention. The project explains that emerging Interventions are those for which one or more studies suggest they may produce favorable outcomes.

2014 Cochrane Review

In a Cochrane review (Geretsegger et al., 2014) for music therapy and Autism Spectrum Disorder, the conclusion reads:

We included 10 studies with a total number of 165 participants. The studies examined the short- and medium-term effect of music therapy interventions (one week to seven months) for children with ASD. Music therapy may help children with ASD to improve their skills in important areas such as social interaction and communication.



2009 Systematic Review of Novel and Emerging Treatments for ASD

In a study (Rossignol, 2009) published in the Annals of Clinical Psychiatry, the author reviewed the effectiveness of autism treatments that are not FDA-approved. Music therapy was the only one to receive a Grade A rating, indicating it was supported by at least two prospective random control trials or one systematic review. More specifically, music therapy was indicated to lead to improvements in speech and communication, autistic behaviors, eye contact, and attention.

How Does Music Therapy Compare to Other Approaches?

In a study (Maw & Haga, 2018) comparing 14 randomized controlled trial studies with a combined 746 preschool-age participants with autism spectrum disorder, the authors examined use of a variety of approaches, such as ABA, Developmental, Cognitive, music therapy, and combinations of these approaches. They found that while Reciprocal Imitation Training and Symbolic Play along with music therapy had the largest effects, music therapy was the most effective because of the shorter duration and lower intensity of interventions required.

Overall, music therapy approaches provide treatment in the least restrictive environment; may allow treatment in mainstream classrooms; encourage changes to occur naturally; address several needs at a time; are generally accessible by all, even when non-verbal; are reality oriented and offer a predictable structure; and may reinforce other therapies.

Applied Behavioral Analyst methods or ABA has long been held to be the only approach available for development needs. While ABA methodology can be used to teach skills and address behaviors, music therapy offers an alternative approach to effect changes that extend beyond the music therapy session and beyond particular skills or behaviors. Current trends in research have shown that highly structured interventions such as ABA, while effective in teaching skills, (Schreibman, 2005) also led to failure to generalize newly learned skills across multiple environments and contexts, lack of spontaneity, and over dependence on prompts.

Advances in the developmental sciences have shifted the treatment paradigm for ASD to more naturalistic developmental programs in which interventionists are incorporating strategies to promote affective engagement and attunement as a means to foster social communication skills within a relational context. Even within the ABA community there is a movement toward a more naturalistic approach. These approaches have been coined Naturalistic Developmental Behavioral Interventions (NDBI) (Wong et al., 2015).



Here is What Some Parents Say About Music Therapy

In a study (Annesley et al., 2020) involving 40 children, aged 6-12, in which parents were asked to express their perceptions about how effective music was for their children, the authors found that among other positive outcomes, the most common expression of positive results was "their child was calmer or more relaxed following music therapy."

My daughter has always responded to music since she was a baby, and we always thought music therapy would help her. She is diagnosed with both Down Syndrome and Autism and she is completely non-verbal....after a year of receiving music therapy we are seeing results that are really impressive. Her gross motor planning has improved; which we see specifically in her dancing! Music Therapy has awakened her to patterns and now she is mimicking us more. We also see that it has improved her communication, her awareness of others, and her surroundings. Her patience and stamina have improved as well. (Testimonial - New Jersey Senate Committee Hearing)

My daughter was diagnosed as having had a perinatal stroke or a stroke in utero....We were told by every top neurologist that she would never walk or talk, sit or stand nor would she ever feed herself....(At five) she has been participating in music therapy for almost 4 years. She vocalizes more during this hour than any other in the day. She participates appropriately in songs such as "If You're Happy and You Know It" and "We are the Dinosaurs". She now is able to hold maracas and mallets to play the xylophone. I know that the hour she spends in music therapy is her happiest hour of the week. (Testimonial - New Jersey Senate Committee Hearing)

My son, 30 years old, living at home....has been diagnosed with static encephalopathy and autism, compounded by blindness....One of the bright spots in my son's life is when he receives music therapy....For that hour, his world becomes a brighter place, one of communication and sharing.... (Music therapy) encourages him to develop new vocabulary words, to work on the concept of counting, to spell out words, to work on fine motor coordination in trying to play the piano, and also on gross motor coordination in having to walk to the door and open it to let his music therapist in. (Testimonial - New Jersey Senate Committee Hearing)



When my son was working on social greetings, his music therapist used a song about learning to say 'hello.' We were walking around the block singing this song, when he greeted neighbors with a smile and a friendly 'hi!' I knew this social greeting would not have happened without practicing it first using music. (AMTA)

My 28-year-old son has used a variety of musical interventions, including music therapy, since he was a toddler. When we incorporate music as one of the strategies to reach a goal, we have seen increased language development, new skills, decreased anxiety, and more appropriate behavior in a group setting...all with huge smiles, pride in achievement and pure joy! (AMTA)

My son could sing before he could talk. Music therapy opened his communication skills and helped him to understand his world. As a teenager, with the help of his music therapist, he was able to sing God Bless America in front of 3000 people at a professional hockey game. (AMTA)

[our son] understands language, but avoids speaking, and yet he knows the tunes of songs and the words of a number of them....[Music therapy] seemed to make his world less frustrating, less closed off....According to staff, [our son] would hurry to get ready to go...to [his] music therapy session, he didn't want to miss it. (Letter to New Jersey Facility Administration)



Finding a Music Therapist Sussex: Unity Music Therapy LLC Andover In NI Morris: ECLC of NJ School, Chatham (Private School Ages 5-21) Private Institutions, facilities and businesses Practice, Flanders See find a private practice NJAMT) Soul Search that offer music therapy services Records, Mountain Lakes (Ages 2 years – Adult) The Music Moment LLC, Mo ris County *Data acquired from self-report December 2021 Essex: Dan's Music Studio, West Orange Deron School Montclair Montclair orn, Inc. Allendale (day habilitation program) John F Kennedy School Newark Kenji Takeda Psychological Services, South Orange Felician School for Exceptional Children, Lodi Hana Music Store, Palisades Park MarbleJam Center for Arts and Enrichment, Hackensack New Beginnings, Fairfie d (School K-12) McCarren Music Therapy LLC, Bergen Count Paradigm Therapeutic Day School, Midlan Park (High School) Northwest Essex Therapeutic School, Belleville (Ages 3-21) Tempo! Music Therapy, Nutley (offers in-person and telehealth services) The Music Moment LLC, Essex County Ben Samuels Children's Center, Little Falls Private Practice, Hewitt (See find a priv A Harry Moore School Jersey City Jersey City Board of E Jucation, Public Schools 8,11,15,22,26,39 & Dickerson practice NJAMT Sussex High School, Jersey City (Infants -12) Passaj lardine Academy Cranford N The Arc of Union County Union County (mostly Mountainside, Roselle, Springfield The Music Moment LLC Union County Bergen Morris Hunterdon: Hunterdon Development Center, Clinton Essex Somerset: Hunterdor Creative Flow Therapy Services, Hillsborough Jammin' Jenn Music Therapy for Children LLC, Watchung and in-home services Matheny Medical & Educational Center, Peapack and Gladstone The Arc of Somerset County, Manville and Somerset County Unior dson Somerset Mercer: Ann Klein Forensic Center, Trenton Music Therapy Services of Central New Jersey, Robbinsville Middlese Neuroscapes, Mercer County Mercer Monmouth Middlesex: Monmouth: Garden State Music Therapy Services, Woodbridge GoMo Health, Asbury Park Neuroscapes – South Brunswick Public Schools & CYO Preschools Mosaic Music Therapy & Neuro-Rehabilitation Srv<mark>cs</mark> Sea Girt and Moomo ath Cty NeurAbilities Healtheare (CN NH Neuro Health), Wall Twnshp The Children's Hospital at Saint Peter's University Hospital, New Brunswick Camden Gloucester: Holy Angels Catholic School, Woodbury Burlington Ocean Main Street Music School, Mullica Hill Northbook Behavioral Health Hospital, Blackwood Ocean: Sale in County Special Services School District, Woodstown Sale in County Special Services School District, Woodstown Children's Specialized Hospital, Toms River Mosaic Music Therapy & Neuro-Renabilitation Srvcs, Ocean Cty den: ddon Heights High School, Hacdon Heights Muzique LLC, Barrington (offers in-person and telehealth services) NeurAbilities Healthcare (CNNH Neuro Health), Voorhees Neurosound Music Therapy, Bellmawr **Atlantic** Atlantic: Cumberland Avanzar, Brigantine (ages 3-17) Neuroscapes – Camden County ...mr.onton (offers in-perso 1 & telehealth services) Muzique LL Private Practice, Camden County (See find private practice N Resurrection Catholic School & Preschool, Cherry Hill Cape May **Burlington:** Archway Programs Upper School, Marlton Bancroft Preschool & Early Education Program, Moorestown New Jersey School of Music, Medford New Lisbon Developmental Center, New Lisbon Oaks Integrated Care, Mount Holly Private Practice, Burlington County West Jersey Music Academy, Moorestown



Finding a Music Therapist In NJ

Find a private practice music therapist on the NJ Association for Music Therapy (NJAMT)

Check a music therapist's <u>MT-BC status</u> on the CBMT website. Note: you will need the music therapist's full name.

Find a music therapist AMTA on the national website.

In New Jersey music therapy services may be funded through:

Individuals with Disabilities Education Act (IDEA) Part B & Part C

State, foundation or community grants

Medicaid waiver

Although New Jersey does not offer Medicaid waivers for music therapy services, New Jersey has utilized state and county agency funds and population specific waivers (i.e., autism, developmental disabilities) to cover the provision of music therapy interventions in a variety of settings.

Division of Developmental Disabilities (Health and Human Services) Requires pre-approval.

As an adult, if you receive music therapy outside the home and you qualify for Medicaid, you may qualify to have the music therapist paid directly from the Division of Developmental Disabilities under the Supports Program. For children under age 21, DDD has proposed a pilot program to provide music therapy as an adjunct service.

Select private Insurance (with pre-approval)

Companies like Blue Cross Blue Shield, United Healthcare, Cigna, and Aetna have all paid for music therapy services at some time. Success has occurred on a case-by- case basis when the therapist implements steps within the reimbursement process and receives pre-approval for music therapy services.

Private Payment

Music Therapy in New Jersey





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