

What is ASD?

Autism Spectrum Disorder (ASD) is a neurodevelopmental disorder, currently affecting 1 in 68 individuals in the United States (CDC, 2014). While the causes are still unclear, the DSM-5 describes the following two cores characteristics of ASD: 1) deficits in social communication and social interaction across multiple contexts, and 2) restricted, repetitive patterns of behaviors, interests, and activities. Interventions, such as music therapy, are crucial for individuals with ASD to maximize their potential and lead fulfilled lives.

Why Music Therapy for Individuals with ASD?

Music Therapy is the clinical and evidence-based use of music interventions to accomplish individualized goals within a therapeutic relationship by a credentialed professional who has completed an approved music therapy program (AMTA, 2005).

People of all ages, cultures, socioeconomic backgrounds, and degrees of abilities respond to aspects of music in daily life. The engaging nature and accessibility of music often elicits positive responses of individuals with ASD (Kern, 2014). Researchers have discussed advanced music memory, responsiveness, and aptitudes within this population; more recent studies show that individuals with ASD may have a heightened musical aptitude and sensitivity to musical elements, yet similar skills of music perception as compared to typically developing peers (Heaton, 2005). While only a small number of individuals with ASD are musical savants (Treffert, 2012), all clients can benefit from music therapy interventions.

What is the Focus of Music Therapy Interventions for Individuals with ASD?

Music therapy interventions focus on enhancing social, communicative, motor/sensory, emotional, and academic/cognitive functioning, or music skills in individuals with ASD. Music therapy services are based on each client's individual abilities, noting preferences, needs, the family's values, beliefs, and priorities. Music therapists work in partnership with clients, families, and teams.

The music therapy assessment process is designed to gain an understanding of the individual's current level of functioning while engaging in a variety of intentional and developmentally sound music experiences. The music therapy intervention plan is based on the assessment outcomes. It integrates a variety of ASD-specific evidence-based strategies (e.g., prompting, reinforcement, picture schedule) and music therapy techniques (e.g., singing/ vocalization, instrument play, movement/dance, musical improvisation, songwriting/composition, listening to music, or computer-based music activities). These strategies and techniques support clients in practicing identified and targeted skills. Music therapy sessions provide familiarity, consistency, structure, and predictability – characteristics that support the learning style of individuals with ASD. Music therapists document clients' responses and conduct ongoing evaluation of progress towards the achievement of goals while making recommendations for generalization and future intervention options. These measures and suggestions may assist the individual with ASD, family, and team to appreciate success while empowering clients to maximize their functioning in all aspects of their lives (Kern & Humpal, 2012).

Does Research Support the Benefits of Music Therapy for Individuals with ASD?

Over the past seven decades numerous anecdotal case studies, narrative reviews (e.g., Reschke-Hernández, 2011) and systemic reviews (e.g., Geretsegger, Elefant, Mössler, & Gold, 2014) describe the benefits of music therapy for individuals with ASD Currently, music therapy is identified as an emerging intervention by the National Autism Center (2015).

The following research-based examples demonstrate the value of music therapy for those with ASD:

- Music therapy interventions are informed by research evidence and incorporate many of the identified ASD-specific evidence-based practices in each session (Kern, Rivera, Chandler, & Humpal, 2013).
- Music therapy services for young children with ASD are very effective for improving communication, interpersonal skills, personal responsibility, and play (Whipple, 2012).
- Music therapy interventions may elicit joint attention (Kalas, 2012); enhance auditory processing, other sensory-motor, perceptual/motor, or gross/fine motor skills (LaGasse & Hardy, 2013); and identify and appropriately express emotions (Katagiri, 2009).
- Music therapy interventions based on familycentered practice may increase social engagement in the home environment and community (Thompson, McFerran, & Gold, 2013)
- Music therapy interventions using musically adapted social stories may modify target behavior and teach new skills (Brownell, 2002).

Where Do Music Therapists Work with Individuals with ASD?

Music therapists accept referrals and provide assessments and interventions to individuals with ASD and their families in public schools, family's homes, private practice settings, preschools/ daycares, music therapy agencies, early intervention programs, treatment centers, support groups, hospitals, and various venues within the community. The role of the music therapist may be as a provider of direct services (i.e., via individual and group sessions), as a coach to parents, or as a consultant to family members/caregivers, educators, or team members (Kern et al., 2013).

Who Pays for Music Therapy **Services?**

Music therapy is an evidence-based health profession and is recognized as a related service under the

Individual with Disabilities Education Act (IDEA). Therefore, preschool, youth and young adults may be eligible for music therapy services under the IDEA Part B. Services also may be funded by states, foundations, or community grants. Many music therapists also accept private payments.

Where can you find a Qualified **Music Therapist?**

Use the AMTA Online Directory to search for a qualified music therapist in your area. For additional information, please contact the national office:

The American Music Therapy Association, Inc. 8455 Colesville Road, Suite 1000 Silver Spring, Maryland 20910, USA Phone: (301) 589-3300; Fax: (301) 589-5175

Website: www.musictherapy.org E-mail: info@musictherapy.org

References

- AMTA (2005). What is music therapy? Silver Spring, MD: American Music Therapy Association. Retrieved from http://www.musictherapy.org/about/quotes/ Brownell, M. (2002). Musically adapted Social Stories™ to modify behaviors in students with autism: Four case studies. Journal of Music Therapy, 39(2), 117-
- Centers for Disease Control and Prevention (2014). Data and Statistic. Retrieved from
- http://www.cdc.gov/ncbddd/autism/data.html Geretsegger, M., Elefant, C., Mossler, K., & Gold, C. (2014). Music therapy for people with autism spectrum disorder. The Cochrane Library, (6). 10.1002/1465.CD004381.pub3.
- Heaton, P. (2005). Interval and contour processing in autism. Journal of Autism and Developmental Disorders, 25(6), 787-793
- Kalas, A. (2012). Joint attention responses of children with autism spectrum disorder to simple versus complex music. Journal of Music Therapy 49(4), 430-452.
- Katagiri, J. (2009). The effect of background music and song texts on the emotional understanding of children with autism. *Journal of Music Therapy*, 46(1), 15-31.
- Kern, P. (2014). Music therapy: Personalized interventions for individuals with Autism Spectrum Disorder. In V. Hu (Ed.) Frontiers in autism research: New horizons for diagnosis and treatment (pp. 607-625). Singapore: World Scientific Publishing Co.
 Kern, P., Rivera, N. R., Chandler, A., & Humpal, M. (2013). Music therapy services for
- individuals with autism spectrum disorder: A survey of clinical practices and training needs. *Journal of Music Therapy*, 50(4), 274-303.

 Kern, P., & Humpal, M. (Eds.) (2012). *Early childhood music therapy and autism*
- spectrum disorders: Developing potential in young children and their families.

 London and Philadelphia: Jessica Kingsley Publishers.

 LaGasse, A. B. & Hardy, M. W. (2013). Considering rhythm for sensorimotor regulation
- in children with Autism Spectrum Disorders. Music Therapy Perspectives, 31(1).
- National Autism Center (2015). National Standards Project,, Phase 2.. Randolph, MA:
- Reschke-Hernanadez, A.E. (2011). History of music therapy treatment interventions for children with autism. *Journal of Music Therapy*, 48(2), 169-207. Thompson, G., McFerran, K. & Gold, C. (2013). Family-centered music therapy to
- promote social engagement in young children with severe autism spectrum disorder: A randomized controlled study. Child: Care, Health & Development.

 Treffert, D. A. (2012). Islands of genius. The bountiful mind of the autistic, acquired, and
- sudden savant. London and Philadelphia: Jessica Kingsley Publishers
- Whipple, J. (2012). Music Therapy as an effective treatment with Autism Spectrum Disorders in early childhood: A meta-analysis. In P. Kern & M. Humpal (Eds.), Early childhood music therapy and autism spectrum disorders: Developing potential in young children and their families (pp. 59-76). London and Philadelphia: Jessica Kingsley Publishers.

Revised 10/21/15 by the AMTA Strategic Priority Group on Music Therapy and ASD for the American Music Therapy Association. Copyright ©2015 by AMTA. All rights reserved. This material may be copied and distributed for personal and educational uses without written consent. For all other uses, please contact info@musictherapy.org.