

Music Therapy

This is an alternate version of the characteristics overview chart on the next page. It is provided for accessibility.

Verbal skills

- Nonverbal
- Mixed
- Verbal

Grade Level

- PK
- Elementary
- Middle/High


Cognitive Level

- Classic
- High Functioning

Areas Addressed

- Adaptive Behavior/Daily Living
- Behavior
- Communication/Speech

Music Therapy

 Verbal Skills	Grade Levels	Cognitive Level	Areas Addressed
<input checked="" type="checkbox"/> Nonverbal	<input checked="" type="checkbox"/> PK	<input checked="" type="checkbox"/> Classic	<input type="checkbox"/> (Pre)Academic/ Cognitive/Academic
<input checked="" type="checkbox"/> Mixed	<input checked="" type="checkbox"/> Elementary	<input checked="" type="checkbox"/> High	<input checked="" type="checkbox"/> Adaptive Behavior/ Daily Living
<input checked="" type="checkbox"/> Verbal	<input checked="" type="checkbox"/> Middle/High	Functioning	<input checked="" type="checkbox"/> Behavior
			<input checked="" type="checkbox"/> Communication/Speech
			<input type="checkbox"/> Social/Emotional



Brief Introduction

In his early work on autism (AU), Kanner (1943a, 1943b) identified music as a special interest of many of the individuals he worked with and studied. His perspective was echoed by Rimland (1964), who posited that music may serve as an intervention as well as a diagnostic tool.



Description

Music therapy is designed to impact the auditory, proprioceptive, and visual sensory systems and can also serve as a motivational tool (Brownell, 2002; Thaut, 1999). According to Griggs-Drane and Wheeler (1997), music therapists use functional behavior assessment procedures to identify individual needs and preferences to develop interventions. These interventions include

- Using music as a calming medium;
- Providing music as a reinforcer; and
- Implementing music therapy to teach and encourage communication, behavior, adaptive behavior, and social skills (Brownell, 2000).



Tips for Modifications

Certified music therapists provide music therapy for students with AU as well as students with other exceptionalities. In doing so, they are held to National Standards of Practice (American Music Therapy Association, 2006) for assessment, treatment planning, documentation, evaluation, and termination. Beyond these specific purposes, music can be used across settings by music instructors and classroom teachers with all students, including those with AU. Indeed, materials have been developed to teach children and you



Summary

Music therapy offers a motivating way of teaching skills to students with AU, including imitation of signed and spoken words and decreased frequency of inappropriate vocalizations and movements. It is a flexible intervention that can be tailored to meet individual needs (Wigram & Gold, 2006).



Research Table

# of Studies	Ages (year)	Sample Size	Area(s) Addressed	Outcome
14*	3-21	123	Social, behavior; academic, communication, vocalizations, motor; cognitive	Mixed

*Note: Includes an integrated review of literature by Whipple (2004).



Studies Cited in the Research Table

- Kern, P., & Alridge, D. (2006). Using embedded music therapy interventions to support outdoor play of young children with autism in an inclusive community-based child care program. *Journal of Music Therapy*, 43(4), 270-294.

The intervention did not result in improved social skills for the four participants with AU (ages 3 to 5). However, the authors reported that music facilitated play and peer involvement, as peers wanted access to the music.
- Whipple, J. (2004). Music in intervention for children and adolescents with autism: A meta-analysis. *Journal of Music Therapy*, 41, 90-106.

This author reviewed nine studies on the use of music therapy with 97 students with AU who ranged in age from 3 to 21. A meta-analysis was conducted on studies that (a) used group or individual subject experimental treatment designs; (b) incorporated music and a no-music control condition; and (c) were refereed papers and publications. Overall, results showed that interventions involving music were more effective than those that did not incorporate music. However, the author cautions that because the studies were so diverse, limited conclusions can be drawn about the effectiveness of music therapy.
- Orr, T. J., Myles, B. S., & Carlson, J. K. (1998). The impact of rhythmic entrainment on a person with autism. *Focus on Autism and Other Developmental Disabilities*, 13(3), 163-166.

This study sought to teach an 11-year-old girl with AU to relax (defined as decreasing excessive movement and screaming) using metered music, also known as rhythmic entrainment (Hoffman, 1995). The intervention was successful in that following the use of music, the girl's negative behaviors decreased.
- Buday, E. M. (1995). The effects of signed and spoken words taught with music on sign and speech imitation by children with autism. *Journal of Music Therapy*, 32, 189-202.

Ten students with AU, ranging in age from 4 to 9, reported that their imitation of signed and spoken words increased during the use of music compared to rhythmic speech.

5. Edgerton, C. L. (1994). The effect of improvisational music therapy on the communicative behaviors of autistic children. *Journal of Music Therapy*, 31, 31-62.
Eleven students with AU ranging in age from 6 to 9 years participated in this study, which investigated the role of music therapy in increasing communication. The study found that music increased this variable.
6. Gunter, P. L., Fox, J. J., McEvoy, M. A., Shores, R. E., & Denny, R. K. (1993). A case study of the reduction of aberrant, repetitive responses of an adolescent with autism. *Education and Treatment of Children*, 16, 187-197.
This study found that music therapy (music played through headphones) used with a 14-year-old student with AU resulted in decreases in inappropriate vocalizations.



References

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- Whipple, J. (2004). Music in intervention for children and adolescents with autism: A meta-analysis. *Journal of Music Therapy*, 41, 90-106.
- Wigram, R., & Gold, C. (2006). Music therapy in the assessment and treatment of autistic spectrum disorders: Clinical application and research evidence. *Child: Care, Health and Development*, 32(5), 535-542.



Resources and Materials

- Center for Music Therapy: <http://www.centerformusictherapy.com/>
This site provides suggestions on how to make music therapy accessible.
- Music Therapy Association: www.musictherapy.org
This website is designed to increase access to quality music therapy services and increase public awareness of the benefits of music therapy.
- National Autistic Society: www.nas.org.UK
This website provides a fact sheet on music therapy.