

# Chapter 105

## Music and Developmental Disabilities

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### ABSTRACT

*The following chapter presents a compilation of research about various types of technology that are employed by music therapists to benefit children with developmental delays. Music therapy can be an effective way to meet the goals of the individual. Music can also be a very powerful motivator. Previous musical skill or experience is not required for music therapy to be effective for clients with developmental disabilities or for clients more generally. Many music-based technologies are designed to create a positive, successful, and enjoyable experience for all users. Music therapy can provide a safe and confidence building environment where children are able to feel in control of a situation, possibly for the first time in their lives.*

### INTRODUCTION

Music therapy provides a unique opportunity, which is not necessarily present in all forms of therapy. Thanks to a wide variety of music based technologies employed during a music therapy session, the child is not only able to work on improving important skills that will benefit him/her in life, but the child is also able to participate in activities that provide happiness and enjoyment. Many children, especially those with more severe physical impairments often rely on others to perform a majority of their daily routines. During music therapy sessions, the child is in control and is able to create and accomplish tasks for him or herself; this may be the first time an opportunity of this sort has arisen. The following chapter provides a brief background on music therapy: what it is, how it is done, why it works, how its effectiveness has been tested, as well as an explanation of a wide variety of contemporary technologies that are being used to benefit children with developmental delays.

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## BACKGROUND

### Music Therapy

#### What Is Music Therapy?

According to the American Music Therapy Association (AMTA), “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). Music is used by a trained music therapist as an apparatus to help elicit a predetermined behavior or goal from the individual (Dolan, 1973, pg. 173). Music can also be used by the therapist to reinforce or prolong the determination of the individual to achieve the chosen behavior (Dolan, 1973, pg. 173).

The purpose of Music Therapy is to, “...address the physical, emotional, cognitive, and social needs of individuals” (AMTA). The main focus of the music therapist is to improve the non-musical skills of the individual such as motor skills, social skills, and educational abilities (Dolan, 1973, pg. 173). Music therapy can open an alternative means of communication for individuals who struggle with verbal expression (AMTA).

Although exposure to music through many different processes can have therapeutic effects, not all of these processes are considered clinical practices of music therapy. “Clinical music therapy is the only professional, research-based discipline that actively applies science to the creative, emotional, and energizing experiences of music for health treatment, and educational goals” (AMTA). For instance Alzheimers’ patients listening to music through headphones and musicians performing at hospitals, though therapeutic experiences are not considered clinical music therapy. However, a music therapist using music to improve the communication skills of a child with autism would be an example of clinical music therapy, according to the AMTA.

#### Why Does Music Therapy Work?

According to an article published in The Journal of Music Therapy, there are “three basic processes” that allow music therapy to be successful (Dolan, 1973, pg. 174).

1. **Structure:** Music has a structure and this structure creates sound, that when heard, stimulates the aural senses of the individual. When that stimulation occurs, it requires a response. In order to elicit this response, a music therapist could use activities such as singing, creative movement and dance, playing instruments, and listening to music.
2. **Self-Organization:** Music presents a unique approach to self-expression for many individuals. Music allows a type of communication which is completely nonverbal, allowing an individual to express his or her feelings, attitudes, and mood. Self-Organization activities can also offer a safe and efficient way for an individual to relieve tension, aggression, and to express negative feelings. The purpose of the self-organization activities should be to create, “success-oriented experiences that allow one to improve his/her self-esteem through music.
3. **Communication:** This is a major element of social interactions. Since music allows for communication to occur completely nonverbally, music also allows for a unique form of social interaction which affords the individual the opportunity to relate to others in new ways. Many individuals who

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