Breaking Through the Shell:
Effects of Music Therapy on Individuals with Autism

An Honors Thesis (HONRS 490)

by

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Abstract

Some say it has the power to heal the soul. Others say it soothes the savage beast. Music holds tremendous power. Although music has been used for healing since ancient times, music therapy as a clinical practice developed in the twentieth century and has recently become a popular tool for treating those with autism. Through the use of music therapy methods, positive effects have occurred in the areas of cognition, daily living, and socialization for those with autism.

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Introduction

Some say it has the power to heal the soul. Others say it soothes the savage beast. Shakespeare regards it as “the food of love.” The power of music is undeniable. Bob Marley even said, “One good thing about music, when it hits you, you feel no pain.” Music is all-encompassing in our lives. While lacing up my sneakers, pulsing dance rhythms blasting in my headphones pump me up for a workout. Just recently, as I glided across a dance floor, butterflies fluttered in my stomach at the sound of a romantic jazz tune. Still, to this day, hearing the pop hit “Baby One More Time” by Britney Spears makes me feel as if I were eight years old again with skinned knees, several teeth missing, and without a care in the world. There’s no doubt about the strong connection between music and the mind.

Istvan Molnar-Szakacs, a neuroscientist at the University of California, Los Angeles, said, “It’s like the brain is on fire when you’re listening to music” (Gaidos & Wolinsky, 2010). Over the past decade, studies have shown music stimulates numerous regions of the brain all at once and can “exert a powerful emotive effect” (Gaidos & Wolinsky, 2010). Listening to a favorite tune can light up reward centers, lower heart rate and blood pressure, and contribute to social functions (Gaidos & Wolinsky, 2010). This applies cross-culturally, as well. Many believe to perceive and enjoy music is an “inborn human trait” (Gaidos & Wolinksy, 2010). This phenomenon seems to have occurred throughout the span of time, as well.
History of Music Therapy

The use of music for healing is an ancient method (Sze, 2006). According to the Bible, King Saul was soothed by David’s harp music. The Greek philosophers Aristotle and Plato also reported its healing effects (Degmecic, Pozgain, & Filakovic, 2005). In the early 1800s, writings on the therapeutic value of music existed and thoughts arose about using music to treat medical ailments. Music therapy, as it is defined today in the modern era, is the “controlled use of music in the treatment, rehabilitation, education, and training of adults and children suffering from physical, mental, and emotional disorders (Baker, 1982). According to the American Music Therapy Association (2013), music is also used to “promote wellness, manage stress, and enhance memory.”

As a clinical practice, music therapy began in the twentieth century. After World War I and World War II, musicians of all types traveled to hospitals around the world to play for those suffering from both physical and emotional trauma. The improvements seen in the patients led doctors to request the hiring of musicians in hospitals (Degmecic, et al., 2005). In the 1940s, innovators and key players in the development of music therapy as an organized clinical profession arose. Psychiatrist and music therapist Ira Altshuler, MD spent much time promoting music therapy. Willem van de Wall pioneered the use of music therapy in state-funded facilities and wrote the first "how to" music therapy text, Music in Institutions. Lastly, E. Thayer Gaston, became known as the "father of music therapy." His work propelled the profession forward in terms of an organizational and educational standpoint (AMTA, 2013). Also in the 1940s, degrees in music therapy became available, with Michigan State being the first to offer the program (Degmecic, et al., 2005).
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By the 1950s, the first lasting professional association of music therapists formed in the U.S (Turner, 2005). The National Association of Music Therapy succeeded where other previous organizations failed by creating a constitution and bylaws, developing standards for educational and clinical training requirements, making research and clinical training a priority, and publishing research and clinical journals. This association operated until 1997. Because of this, music therapy professionals grew from a few to thousands. Running alongside the National Association of Music Therapy for a number of years was the American Association of Music Therapy. Many of the goals and purposes of the two groups were similar; however, they differed slightly in philosophy and approach. In 1998, the two associations merged to create the American Music Therapy Association. For the first time, the profession of music therapy was united. Today, the association serves thousands of music therapists and has expanded the practice throughout the world (AMTA, 2013).

While formerly occurring primarily in hospital settings, music therapy has also moved to aid individuals in schools settings, nursing homes, and correctional facilities. In addition, many studies have been conducted and research has been collected in the practice of music therapy. Though the field has grown, knowledge is still limited and much of the support for music therapy is anecdotal. However, a great deal of work is being done with a very special population—those with autism.

Autism—A Brief Background

According to the National Center for Disease Control, as cited by Hourigan & Hourigan (2009), one out of 150 children in the U.S. is diagnosed with autism. This figure is rising ten to seventeen percent a year. In the 2000-2001 school year, 15,000 individuals ages three to five
years and 78,000 for those between the ages of six and 21 received federal funding for services related to autism (Whipple, 2004). The male to female ratio of incidence is three to one (Hill & Frith, 2003). Typically, early infantile autism can be traced to the fourth month of life, but often it is not noticed until the first couple years of life (Baker, 1982). Autism falls under the umbrella category of pervasive disorders. These include 1) Autistic disorder, 2) Asperger’s disorder, 3) childhood disintegrative disorder, 4) Rhett’s disorder, and 5) pervasive disorder, not specified (Hourigan & Hourigan, 2009). The chief criteria for autistic disorder can be found in diagnostic handbooks like ICD-10 and the DSM-IV.

Autism spectrum disorder is a life-long disabling condition marked by “severe impairments in social functioning and reciprocation, deficits in speech and language, and unusual behavioral manifestations such as habitual repetitive movements and great distress from environmental changes” (Boso, Emanuele, Minazzi, Abbamonte, & Politi, 2007). These consequences are thought to be a result of a neurological disorder that affects normal brain function (Hourigan & Hourigan, 2009). Individuals with autism tend to be extremely withdrawn, isolated, seem to live in their own world, and fail to relate to people, preferring objects instead (Baker, 1982). Dr. Richard Solomon, as cited by Hourigan & Hourigan (2009), equates this solitude to the idea of a “comfort zone.” This concept was derived by the child development psychologist, Vgotsky. The “comfort zone” is part of his larger scheme of proximal development he developed in the early 20th century. The struggles that many children face with autism cause them to retreat into this comfort zone (Hourigan & Hourigan). This can cause serious issues with communication. Often, those with autism will shut people out. They also use evasive strategies that include shouting, rocking, pushing away, and vocalizations (Graham, 2004).
Individuals also have uneven patterns of intelligence. In general, they tend to do very well with factual information, rote memory, and attention to detail (Hill & Frith, 2003). Anyone who has seen the film, *Rain Man*, has gotten a glimpse of this aspect of autism. This film portrays how some individuals have an extreme capacity for remembering facts. While this area of intelligence is highly developed, many individuals with autism seem to have underdeveloped common sense and comprehension (Hill & Frith, 2003). This relates to another issue. Many fail to acquire "theory of mind." Theory of mind is the ability to attribute mental states to themselves and others. A famous psychological study by Baron-Cohen describes this. In the test, children were shown two dolls—one named Sally and another named Ann. The children were shown that Sally had a basket and Ann a box. Sally places a marble in her basket, and then goes outside. While she is outside, Ann moves the marble into her own box. Sally returns and the children are asked where Sally will look for her marble. To normally-developing children, the answer is simple. The doll will look for the marble where she believes it is, but not where it actually is. However, eighty percent of children with autism failed to correctly answer the question. They stated Sally would look in Ann's box, even though they understood the doll did not know the object had been moved from its original location. Theory of mind relates to the understanding and the interpretation of irony, non-literal language, and deception, as well. Individuals with autism have struggles in these areas (Hill & Frith).

Autism can also contribute to further disorders. One potential disorder involves sensory processing. Normally, the human sensory system processes information and provides a useful response. This is usually accomplished unconsciously. For instance, when we climb stairs, we alternate our legs or as we are about to fall, our hands reach out to catch ourselves. This is all done quickly and involuntarily. For those with sensory processing disorder, these responses do
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not always occur and are not unconscious (Hourigan & Hourigan, 2009). This disorder is also thought to be related to “aberrant attention” often exhibited in persons with autism and can contribute to difficulty processing social situations, specifically the complex nature of social cues and facial expressions (Ceponene, Lepisto, Shestakova, Vannala, Alku, Naatanen, & Yaguchi, 2003).

Another condition is termed echolalia. With this disorder, a phrase is constantly repeated. Many times the words have no relation to what the person is trying to communicate. This is a form of self-stimulation that can be a signal of escaping into the comfort zone mentioned previously (Hourigan & Hourigan, 2009).

Despite these issues, individuals with autism can comprehend much more than they can express (Hourigan & Hourigan, 2009). Music may be the common language to link these individuals to the outside world. Analyses of data show that structured music therapy interventions may be beneficial to those with autism spectrum disorder (Bosso, et al., 2007). Based on work done by Whipple (2004), information about musical abilities, preferences, and other auditory skills assessed support this statement. Not only do individuals with autism perceive music well, but they are also able to outperform their peers in pitch discrimination and in the perception of the detailed structure of melodic segments (Ceponene, et al., 2003). It seems that music can be the tool to break through the shell in order to reach these people.

The Power of Music on Autism

A few years ago I had my first experience interacting with a student who was autistic. This young lady spoke only a few words to me and seemed disinterested in anything I had to say. As music on the radio began to play, this girl lit up. She bobbed her head along with the rhythm
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of the music. Her demeanor completely changed and she began singing along to the familiar
country song heard over the speakers. After this, we sang together songs like “Row Your Boat.”
Before, hearing the music there was such a communication barrier between us, but once music
entered the picture, we shared common ground.

While the power of music can easily be seen in ordinary individuals, the effects may be
even more marked in those with autism (Gaidos & Wolinsky). “Individuals with autism often
show interest in, and a positive response to, listening, playing, and producing music,” according
to some (Hillier, Greher, Poto, & Dougherty, 2011). Music offers structure and predictability
and can foster feelings of belonging and connectedness. It has also been shown to increase
involvement and communication (Hillier, et al., 2011). Through music, scientists are hoping to
find ways to rewire the brain or find alternate paths for working with underperforming regions of
the brain (Gaidos & Wolinsky). In the clinical music therapy process, unique outcomes could be
possible (Degmecic, et al., 2005). Sze (2006) calls music a “sophisticated cognitive, linguistic,
social and psychological vitamin pill.” Using music therapy interventions, individuals with
autism have shown improvement in cognition, daily activities, and social functioning.

Addressing Key Areas of Struggle for those with Autism

Cognition:

As expressed earlier, the brains of individuals with autism are wired differently than
others. Children on the spectrum have unique processes by which they acquire and retain
understanding and demonstrate knowledge (Hourigan & Hourigan, 2009). This provides many
challenges to learning. However, the addition of music in classroom and other learning
environments has proven beneficial. According to researchers, brain function physically changes
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with music (Turner, 2006). Recent studies using fMRI images have shown this. It has been said, the structure of music “is truly a gateway to the brain” (Summa-Chadwick, 2009).

Music integration provides hands-on experiences to develop reasoning, problem-solving, analyzing, and creating. It also aids in remembering sequences and creating categorical structures (Sze, 2006). To improve cognition, therapists use musical instruction most frequently. This involves the therapist acting as a teacher to guide the student in singing or playing an instrument. Having the student choose instruments and helping plan performances also enhances cognitive abilities (Kaplan, Steele, & Louise, 2005). Using well-known songs, music therapy can improve language. Lim, as cited by Lim & Draper (2011), examined developmental speech language training through music in 50 children with autism spectrum disorder and found music training effective in four areas of language: semantics, phonology, pragmatics, and prosody. Semantics is the meaning behind language; phonology deals with how sounds are used in language; pragmatics relates to how words are used in a certain context; and prosody involves the use of pitch, tempo, or loudness to convey meaning in language. To achieve this, it is believed that the students perceived linguistic information embedded in music.

To understand concepts, rhythm in music has also been helpful. By nature, rhythm is structured and predictable, so the brain responds with predictable entrainment patterns. Entrainment is a natural phenomenon in which two rhythmic processes synchronize. Therefore, in individuals with autism, music can actively engage the brain and can assist in creating a physiological response. Furthermore, scientists believe music can assist with brain plasticity, which indicates that changes can occur in the structure of the brain based on experience or training (Summa-Chadwick, 2009).
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Perhaps one of the biggest struggles for those with autism (and an even bigger struggle for those trying to teach this type of person) is attention—or lack thereof. Acquiring improved attention is very important in cognition (Summa-Chadwick, 2009). While this can be difficult in many typical environments, music activities can structure academic learning. Here, the senses become engaged and attention can be focused (Walworth, 2007).

Specifically, five categories of attention exist (Summa-Chadwick, 2009). These are focused, sustained, selective, alternative, and divided. Focused attention is the ability to respond to a single stimulus specifically and completely; sustained attention is the ability to maintain focus for a continuous amount of time; selective attention involves the ability to maintain attention to a specific stimulus when there is something else competing for attention; alternating attention requires the ability to shift between alternating tasks; and divided attention is the ability to simultaneously respond with multiple tasks present. Interventions outlined below can be used to foster these different types of attention.

The simplest of these to facilitate is focused attention. Simply the playing of a musical instrument is often enough to attract the attention of an individual.

Sustained attention can be created by a musical task in which a client is given two different rhythmic instruments to choose from and is allowed to choose two simple songs he or she wishes to hear. Each song, then, is linked to a specific instrument. When the client hears one song, he or she should play the corresponding instrument. With this exercise, the individual is focusing sustained attention on the musical task and building the pathways to transfer this attention to other generic tasks.
Selective attention is developed when the musical activity has competing attention from another stimulus. Using the situation described before, a "heckler" could be added to distract the client from the task at hand. In this scenario, the heckler is to play some sort of loud, percussion instrument, which is often difficult to ignore.

Alternating attention is created as an individual intentionally shifts attention from one task to another. To accomplish this, a musical task can be used with the aid of two facilitators who sequentially play different rhythms on percussion instruments. The client would be given a rhythmic instrument and would be asked to follow and imitate the pattern played by the first facilitator. Once this is achieved, the second will begin playing a different rhythm, which the client must imitate. The two facilitators continue alternating back and forth, having the individual repeat.

Divided attention is likely the most difficult for individuals with autism to accomplish. This type of attention requires the client to focus on two different stimuli at the same time, as opposed to sequentially. Again, this exercise will employ the use of two facilitators. As before, the first facilitator plays a rhythm, however, he or she will continuously change these rhythms as the client is asked to imitate. The second facilitator is used to signal the client to stop or start playing. While the individual is following the patterns of the first facilitator, he or she must also divide attention to receive the cues from the second facilitator (Summa-Chadwick, 2009).

These interventions described may be difficult for an individual with autism to master at first, but after continued practice, improvement in attention has been demonstrated. Achieving this will allow the individual to make much progress in other areas, as well. Attention is a keystone to building competencies in other areas of life for the individual with autism.
Daily Living:

For an individual with autism, even simple daily tasks can require much effort. For most of us, we go to school or work, return home, complete chores around the house, and eventually go to bed for the night. We transition through our day with little to no thought and complete certain tasks, like brushing our teeth, almost involuntarily. However, due to the nature of autism, this isn’t quite so easy. Music therapy interventions may help an individual on the spectrum improve in these areas.

For individuals still in school, due to the obstacles children with autism face, typical classroom behaviors like sitting, doing independent work, and taking turns can be difficult (Hourigan & Hourigan, 2009). Hayoung & Draper (2011) suggest using musical experiences paired with desired behaviors. For example, teachers and parents can play songs to correspond with certain activities. Perhaps the child could even sing along. This will allow the student to understand what is happening and adjust to the new task. Similarly, music has been shown to be a very effective tool in transition times throughout the day (Walworth, 2007). Those with autism tend to prefer rigidity and a change in a schedule can cause distress. Playing a favorite song can relieve this and prepare the child to move into a new activity. Songs can also be used in the classroom to create a daily routine (Walworth, 2007). After hearing certain songs for activities like beginning the school day, lunch time, and getting on the school bus, the individual will be able to anticipate what is coming next. These suggestions can make the school day run smoother for both the individual with autism, as well as for classmates and teachers.

As mentioned previously, simple daily tasks can prove difficult for those with autism. Music therapy may be used to assist in learning these activities. Baker (1982) describes that
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Once a child is capable of paying attention to a therapist and a trusting relationship is built, self-care skills can be taught. This is accomplished through fostering imitative behaviors. The author describes her particular clinical experience which can provide a template for others to use.

Upon reaching the thirty-fourth session, Baker taught her client to brush her teeth. She brought music into the bathroom, toothbrush in hand, and placed one in the client's hand. At this time, the client beat the toothbrush against the sink to the rhythm of the music and said, 'Toothbrush.' For a brief period, the therapist imitated this behavior. She then put the toothbrush to her teeth, pointed and said, 'Teeth.' The client imitated the behavior of Baker. Next, Baker began to brush her teeth to the beat of the music, spit into the sink, and repeated this behavior several times. The client began to follow along. The therapist then stopped and directly asked the individual to brush her teeth. She accomplished the task and Baker rewarded her with verbal reinforcement. Baker also had success with this client in other activities like combing her hair, buttoning her shirt, and putting on shoes.

Using music therapy to teach daily living skills can prove very beneficial. As the individual becomes more comfortable, the role of the therapist can diminish (Baker, 1982). These activities can also be structured into a song to aid in the remembering of steps and can give the individual more independence (Walworth, 2007).

Socialization:

Isolation is one of the most difficult symptoms regarding autism. To reach these individuals, it is important to break the shell that surrounds them (Baker, 1982). To fully connect with those on the spectrum, it is important to first work towards emotional intelligence. Though this is a struggle, it is crucial to work towards helping the individual attempt to
understand the emotions of others and express the emotions they themselves are feeling. In order to engage socially, individuals must look out past their comfort zone and interact with others. Finally, once this becomes comfortable, communication can begin to be established.

Socialization is quite possibly the most frustrating aspect of autism—for both the individual and those around him or her. Music therapy has been shown to aid in this aspect of life for individuals with autism.

This can be achieved by tapping into the emotions of a client using music as a gateway. Music elicits an emotional response via extra musical association. The power to affect emotions is magnified by direct access to the affective domain versus traveling through the higher brain and cognitive processes. This is facilitated through the human quality of rhythm. Beat in music is quite analogous to pulse. Using slow, quiet music relaxes the client and reduces anxiety, so that a trust connection may be established (Gadberry, 2011). Also, using musical examples that acknowledge and sometimes mirror the client’s feelings and responses can also facilitate trust during a therapy session (Rainey Perry, 2003).

Once trust is gained, an individual may open up to show the emotions he or she is feeling. However, this may not be the easiest thing to interpret. Graham (2004) describes her encounters with client “J”, a man in his thirties diagnosed with autism. This individual did not speak, but after a number of sessions, Graham learned much about what he was feeling. She noticed there was a distinct difference in the vocal sounds he would produce. At times, he would make high-pitched screaming and whooping noises, and other times, he would hum a lower-pitched motive. She soon learned those screaming noises were a signal of distress and the humming motive was a key to his inner self. This vocalization was used to calm and reassure himself. Interpreting these sounds allowed the therapist to understand how “J” was feeling.
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While expressing emotion is difficult for those with autism, understanding the emotions of others could be considered even more challenging. Music may be able to serve as a channel for emotion, however. A recent study using functional MRI compared brain activity in autistic children to that of typically-developing children when asked to identify emotions in music. The results showed that both groups had the same level of brain activity. When showed pictures of emotional faces, however, the children with autism scored much lower (Gaidos & Wolinsky, 2010). “It seems like music acts as a sort of in, or doorway, to the [emotional] recognition system of children with autism,” said neuroscientist Molnar-Szakacs (Gaidos & Wolinsky, 2010). Molnar-Szakacs developed a music program to aid in this. This program helps those with autism match emotions in social settings. The goal is not to simply have happy music paired with a happy face, though. It works to help children learn to recognize different emotions on a face, no matter the situation.

Gaining this emotional intelligence can assist individuals with autism on their way to being prepared to engage socially. Social skills are a complex set of skills that include communication, problem solving, interaction, and self-management. To be socially competent, individuals must interpret social situations, identify appropriate skills for the scenario, and be motivated to use them (Gooding, 2011). This can be quite a feat, as social challenges are a defining feature of autism and many individuals lack the ability to form age-appropriate peer relationships, and possess limited understanding of social cues (Hillier, et al., 2011). Happily, music is “fundamentally social” (Gooding, 2011). According to Gaidos and Wolinsky (2010), music can serve as a “crucial social glue,” establishing unity, belonging, and trust.

Music therapy has been deemed highly effective to improve social skills. Research has pointed to promoting interpersonal behaviors and increasing appropriate reactions. However, no
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program as of yet, has been specifically designed to combat social skills deficits (Gooding, 2011). There are some methods that seem to work quite well, though. Interactive instrument playing and interactive singing promotes social interaction (Kaplan & Steele, 2005). Physical movements, like dancing to music, also increased socialization (Murphy & Fitz Simons, 1958).

A “movie soundtrack” project, as designed by Hillier, et al. (2011), though it was difficult given the underdeveloped social skills of many of the participants, ultimately benefited the individuals through their ability to work together and compromise to complete the project. They also were reported to have met up with each other outside of the sessions and communicated with each other via social networking sites. Despite the scenario, the closeness gained through sharing common experiences may be one of the most important functions of music therapy regarding social interaction (Ceponene, et al., 2003).

One aspect of socialization that many individuals on the spectrum greatly struggle with is communication. In human culture, “communication is a necessity of life,” said Syder, as cited by Graham (2004). Though some may take the leap in engaging socially, using language for communication is still difficult. In music therapy, “the language of music so used is an excellent bridge between the completely nonverbal language of gesture and the apparently threatening domain of words” (Wolf, Ruttenberg, Levin, & Levin, 1969).

A 1956 study that included five girls with speech problems serves as an example of methods that could be used to encourage communication. These girls met with three therapists thirty minutes a day, for four days a week. During this time, clients participated in song fests. These were group singing sessions. The therapist would play an autoharp, allowing the children to strum the strings. Each child was encouraged to make a contribution by making up songs
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about themselves, their family, or their peers. As the therapy progressed, the girls became more confident and comfortable, talking more.

After the study was complete, the clients were rated on a scale covering speech intelligibility, voice volume, speech mechanism motility, pitch and variety, amount of talking, ease in voluntary speaking, and attitudes towards themselves, the therapists, the group, and the activities of the group. All of the girls showed improvement and their speech became louder and clearer and their behavior and interactions took on more spontaneity (Murphy & Fitz Simons, 1958).

The Nordoff and Robbins therapy method has also been deemed appropriate in encouraging communication in those with autism. This type of approach involves spontaneous musical improvisation. In the sessions, the client’s instrumental and vocal responses are acknowledged and incorporated into the therapist’s music. This interplay mimics the “reciprocal, dynamic, and active” nature of communication (Rainey Perry, 2003). This type of process is a starting point for greater communication, especially in those with more severe communication issues.

This approach seems to be taken from the methods used for Lolita, a client at the Day-Care Unit for Autistic Children in Philadelphia during the 1960s. At three years old, this child was severely withdrawn and rejected the environment of the day-care. It was at this time the study of vocalizations by children with autism began. Lolita’s first sounds were deemed as a tool she used to shut out what she did not want to hear. Though uncommunicative, this sound was a step above just withdrawing into “obliviousness.” During many sessions this continued as the therapist sang and played the piano. After her fourteenth session, Lolita timidly tried to
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follow the music she was hearing. During the twenty-seventh session she even attempted to say “bye” and “good” during the goodbye song, which she had heard many times by this point. As the sessions progressed, Lolita’s sounds became even more musical and consistent. At the end of her therapy, after nearly fifty music therapy sessions, she began to make greatly articulated sounds along with the music (Wolf, et al., 1969). Clients using this type of therapy can take the word sounds learned and begin to transfer them into functional spoken language, eventually. Using music therapy to help increase communication in those with autism can help expand their bubble to include our world, as well as let us see into theirs.

Conclusion

Writer Victor Hugo has said, “Music expresses that which cannot be said and on which it is impossible to be silent.” The effects of music therapy are a testament to these beliefs. According to Summa-Chadwick (2009), “the benefits of music have been proven to benefit populations of mankind through evidence-based research.” Once an experimental practice heralded by few, music therapy has now grown tremendously in the twentieth century. Now today, music therapy is beginning to fully come into the mainstream. More and more colleges are offering degrees in the field, with some even boasting doctoral programs. Hospitals, schools, and nursing homes frequently hire music therapists as part of their staffs. Even many insurance companies are covering the use of music therapy. From my experience, it also seems that nearly everyone has seen the effects of music touch someone. Whether it be an elderly parents who has been suffering from illness or a child with a disability, most have seen the power of music in action. Perhaps some of the strongest support and loudest accolades come from those who have seen the benefits with their own eyes and know the difference it has made.
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Through the evidence and descriptions provided, a glimpse into how music can benefit those with autism has been provided. Music therapy can be used to improve cognition, daily living, and socialization. However, after reviewing research and data, it may be most beneficial to prioritize goals (Kaplan & Steele, 2005). For those interacting with these individuals, communication and social skills are a major concern. Not only is this area paramount to reaching individuals with autism, but it can also be an area of extreme difficulty for some. It seems that beginning treatment by establishing a trusting environment, where the client feels safe, can encourage the individual to be receptive to communication and may then open the door to other areas. Then, the therapist may be able to move on to teach daily living skills and work towards learning new concepts that can be transferred and used at home, school, and in the community (Kaplan & Steele, 2005).

Despite the positive results, still more research needs to be done in order to learn how music therapy can most benefit those with autism. Future efforts could examine additional factors of therapy such as length of time in therapy, frequency of sessions, the effect of different therapists, and whether therapy presented in a school setting or privately is more beneficial (Kaplan & Steele, 2005). As therapists continue their work with this particular population, more information will become available.

“Breaking through the shell around an autistic child is a job for the most powerful kind of therapy,” according to Wolf, et al. (1969). The strong force of music is powerful enough to shatter the surrounding shell and reach in to touch the individual inside.
References


