Action Through Music: A Resource for Change. Music Therapy for a Therapeutic Day School

A Program Proposal for Ulster BOCES Special Education Building

By:

Edward Zifchak

In Partial Fulfillment of the Requirements for the Degree of

Master of Science

#### A THESIS

SUBMITTED TO THE DEPARTMENT OF MUSIC THERAPY

OF THE STATE UNIVERISTY OF NEW YORK AT NEW PALTZ

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF

MASTER OF SCIENCE IN MUSIC THERAPY

August 2019

Action Through Music: A Resource for Change. Music Therapy for a Therapeutic Day School:

A Program Proposal for Ulster BOCES Special Education Building

#### Edward Zifchak

State University of New York at New Paltz

We, the thesis committee for the above candidate for the Master of Science degree, hereby recommend acceptance of this thesis.

Heather Wagner, PhD, MT-BC, Thesis Advisor Department of Music Therapy, SUNY New Paltz

Eric Fraser, MA, MT-BC, Thesis Committee Member Department of Music Therapy, SUNY New Paltz

Elisa Parker, LCAT-P, MS, MT-BC, Thesis Committee Member

Approved on:

Submitted in partial fulfillment of the requirements for the Master of Science degree in Music Therapy at the State University of New York at New Paltz

# Table of Contents

1.	Acknowledgements					
2.	Summary Statement_					
3.	Statement of Need					
	a.	Music Therapy Overview	6			
		Personal Statement	8			
		Theoretical Orientation				
	d.	Music Therapy in Special Education	10			
4.	Review of the Literature					
	a. Music Therapy and Behavioral Needs					
		Music Therapy and Social Needs	16			
		Music Therapy and Emotional Needs	20			
	d.	Music Therapy and Communication Needs	22			
5.	Proposed Music Therapy Program					
	a.	Program Details	26			
	b.	Group Sessions	29			
		i. Music Activity Group	29			
		ii. Music Expression Group	30			
		iii. Music & Movement	31			
		iv. Community Performance Group	32			
		v. Drumming Group	33			
	c.	Individual Sessions	35			
	d.	Music Sanctuary	35			
	Large	Group Context	36			
7.	Outcomes and Assessment					
8.	Financ	eial Proposition	37			
9.	Concl	usion	40			
10	Refere	ences	41			
11.	Apper					
	a.	Appendix A: Annotated Bibliography	49			
	b.	Appendix B: Group Session Note	62			
		Appendix C: Goal Tracking	63			
	d.	Appendix D: Individual Session Note	64			
	e.	Appendix E: Assessment	65			
	f.	Appendix F: Referral Form	67			
	g.	Appendix G: Termination Form				
	h.	Appendix H: Music Therapy Fact Sheet	69			
	i.	Appendix I: Resume	71			
12.	Tables					
	a.	Table 1: Benefits of Music Therapy as It Pertains to Student Needs	25			
	b.	Table 2: Tentative Weekly Schedule	28			
	c.	Table 3: Budget	38			

# Acknowledgements

I would like to thank Heather Wagner, my thesis advisor, for her substantial support and guidance from the very beginning. I would also like to extend my gratitude for Eric Fraser, and Elisa Parker, thesis committee members, who were instrumental in helping finalize my thesis proposal.

# **Summary Statement**

I am proposing a music therapy program for an Ulster BOCES therapeutic day school for children and adolescents with special needs. Among the wide variety of services that Ulster BOCES provides, which include occupational therapy, physical therapy, speech therapy, counseling, a career academics program, intensive and typical management needs programs, a life skills development program, and an autism program for independent education, a music therapy program has yet to be developed. After working firsthand within this special education program as a substitute teacher, conversations about the potential to provide music therapy has caught the interest of the principal, assistant principal, and other faculty and staff who have endorsed the need for it. Throughout my master's level education, I have learned a great deal about how music therapy can positively influence the lives and education of children and adolescents with unique needs. I feel my past interactions with and knowledge of this population gives me the skills necessary to provide music therapy at the Ulster BOCES Special Education site.

## **Statement of Need**

Music therapy is recognized as a related service under the Individuals with Disabilities

Education Act (IDEA) (Adamek & Darrow, 2018; American Music Therapy Association, 2015;

Ritter-Cantesanu, 2014). Thus, music therapy can be incorporated into any student's

Individualized Education Program (IEP). Because of the nature of the therapeutic day school,

IEPs are typical for students attending the Ulster BOCES Special Education program. This level

of educational involvement in a student's schooling speaks to the potential benefit and need for

music therapy within Ulster BOCES. In addition, music therapy has potential for implementation

and benefit for students outside of the IEP parameters. Engagement in IEPs can further be explored for reimbursement purposes, but this program as proposed will operate under a different framework in order to provide the greatest benefit for the highest number of students.

The Ulster BOCES Special Education program seeks to "meet the specific needs of their students in order to assist them in realizing their potential to achieve both academically and socially" (Special Education, 2019, para. 3). This program serves children and adolescents with a variety of social, emotional, behavioral, and educational needs as it pertains to their diagnoses and life circumstances. Student diagnoses include but are not limited to social/emotional disorders, behavioral disorders, learning disabilities, and autism spectrum disorder (ASD). Music therapy has been shown to be effective in addressing symptoms and needs exhibited by children within these populations (Adamek & Darrow, 2018).

#### **Music Therapy Overview**

Davis (1987) reported some of the earliest findings of music related treatment documented in dissertations as early as 1806. These works still hold significance as some of the named concepts, such as iso principle, are still applicable to this day. As time passed, the first academic forms of music therapy were recorded in the mid-1940s (AMTA, 2019a). Since then, the practice of music therapy has developed tremendously, making significant advancements each decade since the mid 20th century.

The AMTA (2019b) defines music therapy as "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" (para.1). In other words, music therapy as an established health profession utilizes music to address needs in

various areas of human functioning including emotional, social, physical, and cognitive domains. Addressing these needs may be accomplished with specific music therapy methods which include improvisatory, re-creative, compositional, and receptive (Bruscia, 2014). Several of these methods will be thoroughly described later as they pertain to the probable needs of the students receiving special education services through Ulster BOCES.

Music therapists undergo rigorous training to become qualified to practice music therapy. One must obtain a bachelor's degree or higher in music therapy, have accumulated a total of 1200 clinical training hours, and passed the music therapy board certification (MT-BC) exam (AMTA, 2019b). Music therapists in the state of New York can also become licensed creative arts therapists (LCAT). This requires that therapists acquire a master's degree within the creative arts that includes 500 hours of advanced clinical training, and have received 1500 hours of post-degree supervision (New York State Education Department, 2019). Once a music therapist is practicing in the field, they are to abide by the AMTA's Code of Ethics and Standards of Practice (AMTA, 2019b). The Certification Board for Music Therapists (CBMT) also maintains a Code of Professional Practice and ongoing education requirements by which music therapists must adhere to sustain their certification (CMBT, 2019).

It is important to acknowledge that music therapy is an evidence-based practice. This allows health professionals to "identify the best available interventions, strategies, and support for clients and bridges the gap between clinical practice and research" (Kern, 2011, p. 91). As evidence of the efficacy and practice of music therapy has emerged, music therapists have strived to propose additional standards, the best available research evidence, and to build the knowledge base of strategies for best practice (Carpente, 2018; Kern, 2011; Wilson, 2002).

#### **Personal Statement**

Music has always been an important part of my life. Ever since I was a child, I remember singing everywhere I went. I played trombone in band until I was introduced to the guitar. Once I picked it up, I could not put it down. As I enhanced my music skills, I learned of music therapy as a senior in high school. This sparked my interest because of my love for music, but also for my love of helping others. I am known for putting others before myself. I feel that my happiness stems from the joy I bring to others' lives. Pursuing music therapy felt like the perfect career choice where I could thrive by providing care for others and continuing to grow as a musician. Once I discovered that New Paltz had a master's program, music therapy became my main focus.

I earned my bachelor's degree in contemporary music at SUNY New Paltz while progressing through the pre-music therapy track. Throughout this time, I became captivated by the power of music and just how deep the therapeutic process of music therapy goes. My interests in music therapy were vast as I read literature about different types of music therapy and their processes. Here I also had my first music therapy observations and began to imagine what type of music therapist I wanted to become as I started my music therapy practicum experiences.

During my graduate studies, my goal was to learn as much as possible, so I chose to take on different placement settings that consisted of a variety of populations. I worked at a facility specializing in the treatment of traumatic brain injury, an assisted living facility for older adults, and completed an internship at the Veterans Affairs Hudson Valley Healthcare System. During my internship I worked with older adults, but also had weekly groups with middle-aged adults whose diagnoses included schizoaffective disorder, various forms of schizophrenia, depression, and cognitive disorders. Their overall goals included such needs as self-expression, body

awareness, and improved energy. This variety gave me the ability to adjust to the needs of new populations and their intended goals. Even after my internship, I felt I still wanted to explore other populations in order to gain new experiences and potentially find my niche.

Since working within the Ulster BOCES Special Education program, I have envisioned myself providing music therapy for their students. I have built healthy and enriching relationships with everyone that I have encountered and feel that these relationships would only grow stronger by taking the role of a music therapist. My easily established connections with the students and fascination with how they interact with the world has only enhanced my desire to work with this population. I feel I have finally found my niche.

#### **Theoretical Orientation**

As a music therapist, I identify with Bruscia's (2014) description of practicing within an integral approach. This entails adjusting to the client's needs as necessary by utilizing different theoretical orientations when needed. Within these theories, I feel most authentic as a music therapist within a humanistic, client-centered approach, utilizing music therapy as it connects to ipseity, agency, and believing in a non-presumptive way of being with someone in therapy (Abrams, 2018). I also feel connected to Rogers' (1957) attitudes concerning empathy, unconditional positive regard, genuineness, acceptance, autonomy support, collaboration, and confidence in individual change. Furthermore, an integral approach with a humanistic foundation will be fitting, as students may need adaptive strategies at any given moment throughout treatment. From my own experience in working with children, there is something special about an integral approach that enlightens interactions and allows for organic reciprocation, both in and out of the music. When considering the involvement of parents/guardians in their child's

education, an integral approach also seems fitting as it may create less tension if adjustments to treatment need to be made. I aim to provide music therapy that enhances the lives of others.

Within the context of Ulster BOCES Special Education program, my theoretical orientation will also encompass awareness in trauma-informed care. Trauma-informed care is a concept that takes into consideration a client's exposure to some form of traumatic event even if the trauma itself is not directly addressed (Goodman et al., 2016). Because many students receiving services have encountered adverse childhood experiences (ACEs) or traumatic events, the staff has made great strides to incorporate trauma-informed knowledge into their student encounters. Thus, my knowledge of trauma-informed care will be incorporated into each of my interactions in all contexts within the Ulster BOCES Special Education program.

# **Music Therapy in Special Education**

The AMTA (2015) highlights the ability for music therapists to address individualized goals which, again, supports the function of IEPs within Ulster BOCES. This is congruent with findings and suggested ways of creating goals for children in music therapy (Adamek & Darrow, 2018; Carpente, 2018).

Unique opportunities for students in special education can be provided by music and music therapy. Music has no boundaries or confinement to language, ability, culture, or gender (Vries, Beck, Stacey, Winslow, & Meines, 2015). Mössler et al. (2017) proclaim that "music therapy invites a child to listen, move, vocalize, or sing and play instruments" (p. 2). Since music is made up of "separate yet interconnected components such as pitch, melody, rhythm, harmony, form, timbre, and dynamics," engagement with these elements of music initiate new, organic

opportunities (Hayoung, 2010, p. 4). Music therapy offers a unique interactive opportunity for students (Walworth, 2007).

Therapeutic musical play can enable children to feel a sense of control over their environment. In turn, music can minimize the socio-emotional impact of adversity and their stressful life circumstances (Pasiali, 2012). The structure and guidance from a music therapist during musical play can allow it to become a resource for children (Pasiali, 2012, p. 46). The importance of music therapy within this context is that it becomes a form of preventative therapy that aims to reduce the likelihood of maladaptive consequences in psychosocial/socio-emotional/behavioral domains.

In music therapy, valuable relationships within the therapeutic process are vital in order for positive changes to occur (Beutler et al., 2004; Cooper, 2008). Pellitteri (2000) states that "the interpersonal relationships between client and therapist are as important, in the process of change, as the music" (p. 382). These relationships formed between therapist and client are "multifaceted," (Bruscia, 2014, p. 158), and there is evidence presenting significant benefits from such interactions (Mössler et al., 2017). It appears that greater development occurs when the music therapist is attuned to various dynamics of childrens' experiences of themselves and the world around them. This too includes experiences in and out of the music between therapist and client. Bruscia (2014) labels these experiences as premusical, musical, extramusical, paramusical, and nonmusical.

In music therapy process, Wilson (2002) elaborated on the importance of "respecting" the parents/guardians throughout the development of their child's special education program (p. 6).

This speaks to the impact that healthy relationships with parents/guardians may have on the

fulfillment of the child's education and goal fulfillment. In turn this also eradicates the occurrence of controversy throughout the treatment process.

A meta-analysis (Gold, Voracek, & Wigram, 2004) analyzed the efficacy of music therapy for children and adolescents with psychopathology which included those with behavioral, developmental, and emotional disorders. Through the analysis of 11 studies it was determined that the average effect of music therapy was statistically significant. There was a particularly large effect of significance on children and adolescents who had developmental or behavioral disorders.

The observable outcomes of music therapy services provide evidence to parents/guardians, school districts, and other health professionals of the clinical influence that music therapy can have on children with special needs. Recent research has made strides in highlighting the benefits of music therapy within special education settings. One example is Carpente's (2018) introduction of goal attainment scaling that evaluates developmentally-based music-centered treatment goals. This process involves creating relevant, measurable goals for clients. The success of goals is measured through calculated scores.

The above accounts of music therapy's capabilities speak directly to the opportunistic qualities that it has with special education. More specifically, music therapy can address the needs of students receiving services from Ulster BOCES.

#### **Review of the Literature**

This literature review provides an expansive overview of the benefits of music therapy services to justify its significance in treating the focus population within Ulster BOCES: children and adolescents with social/emotional disorders, behavioral disorders, learning disabilities,

autism spectrum disorder, and children who have experienced adverse childhood experiences (ACEs). These latest scholarly sources within the literature will be extensively summarized in the annotated bibliography (see Appendix A). Supportive literature clearly indicates that music therapy can be beneficial for the students in special education at Ulster BOCES.

## **Music Therapy and Behavioral Needs**

According to Adamek and Darrow (2018), "a behavior disorder can affect every area of a student's development" (p. 193). These students are at risk for school failure which may result in life complications in the future. Music therapy can be utilized to address the needs of students who present with aggressive behavioral patterns or who have behavioral disorders. Adamek and Darrow (2018) note that the simple act of engaging in music becomes a preventative measure for their behaviors. Hitting others or making inappropriate verbalizations is less likely to occur while a child is engaged in playing an instrument. Often times, instrument learning naturally elicits control over behaviors since students are engaged in playing the instrument, focusing on reading music, and holding the instrument.

Montello and Coon (1998) conducted a study on the effects of active and passive group music therapy on pre adolescents with behavioral disorders. Participants (n=16) were students enrolled in a special education program in a public school in New York City whose ages ranged from 11 to 14 years old. While receiving a total of 24 music therapy sessions, students switched to different groups halfway through the study. After comparing data, results indicated that students can alter their states of frustration, anger, and aggression through the use of a combination of passive (music listening) and active (rhythmic training and improvisational music therapy) music therapy sessions. Greatest results were found in students who transitioned

from the passive to the active music therapy groups. Reports submitted by teachers indicated a decline in disruptive behaviors from the students in the active music therapy groups.

De Mers, Tincani, Van Norman, and Higgins (2009) examined the effectiveness of social stories on three young children, ages 5 to 6 years old, within a special education setting who presented with challenging behaviors such as hitting and screaming. Through the use of visual analysis following music therapy sessions, researchers found that music therapy decreased hitting and screaming in all three of the students. It was also noted that improvements, as a result of the sessions, continued for at least three weeks following the music therapy intervention.

Pasiali and Clark (2018) examined the use of music therapy for school-aged children with limited resources in the form of an afterschool program. Twenty students, ages 5 to 11 years old, participated in eight 50-minute group sessions that consisted of various music therapy interventions that include but are not limited to Orff-based musical exercises, role-play, improvisation, songwriting, and music performance. Accumulation of the data presented significant decreases in low performance/high risk behaviors in the classroom following music therapy. There were also notable decreases in problem behaviors and hyperactivity.

Wölfl's (2016) described a music therapy group drumming program, DrumPower, that utilized improvisation and performance for the prevention of violence in German schools. She stated that, while drumming, students' feelings of "aggression and destruction" were substituted with feelings of "power and strength" (p. 68). As a result, DrumPower in schools resulted in less aggressive behaviors in the students. In her conclusion, she affirmed that DrumPower effectively prevents violence in students in a school setting.

Rhythm-based strategies utilize rhythmic elements to "create, express, and guide successful therapeutic experiences" (Ross, 2016, p. 100). Ross's (2016) pilot study explored the effectiveness of rhythm-based interventions with students, aged 3 to 5 years old, who were diagnosed with behavioral disorders. After 9 months of 30-minute rhythm-based music interventions, Ross's (2016) analyses concluded that rhythm-based interventions were beneficial in decreasing behaviors such as interrupting, inappropriate verbal behavior, noncompliance, aggressiveness, impulsiveness, and inattentiveness.

Choi, Lee, and Lee (2010) assessed the use of group music interventions on aggression in Korean school children (n=48), ages 10 to 12 years old, who displayed highly aggressive behaviors. Students were separated into a music therapy and control group. The music therapy group consisted of several interventions that include singing, playing instruments, and songwriting. Parents and teachers recorded data through the use of a scale and an assessment of aggression. After comparing results between the music therapy group and control group it was determined that participants in the music therapy group had displayed significantly less aggression than the control group.

According to See (2012), children with ASD often have accompanying behavioral problems such as restlessness, fidgeting, tendencies to engage in hitting and touching others, shouting or screaming, having temper tantrums, being inattentive, being non-compliant, spacing out, and having a stiff body. See (2012) provided 10 months of weekly music and movement sessions for two groups of children with ASD. Group one (n=18) consisted of children whose ages ranged from 2 to 10 years old and group two (n=23) consisted of children ages 11 to 22 years old. Sessions consisted of a greeting and participating in hand actions, body movements,

dance routines, and singing. From evaluations conducted by parents, music teachers, and the research assistant, data revealed statistically significant improvements in target behaviors in both groups. Although not all behavioral items yielded high positive change, See (2012) concluded that music therapy is beneficial in improving behavioral outcomes and modification in children with ASD.

## **Music Therapy and Social Needs**

Music therapy can be utilized to teach or enhance social skills of children and adolescents in school settings (Adamek & Darrow, 2018). Adamek and Darrow (2018) add that some skills that can be addressed include but are not limited to sharing, taking turns, interacting with peers, and succeeding in leadership roles. Improvement of these skills can be observed through nonverbal means or through student feedback following sessions. In this context it is also important to first consider the interpersonal relationships developed between child and therapist.

Gattino, dos Santos Reisgo, Longo, Leite, and Faccini (2011) conducted a randomized controlled study that investigated the effects of relational music therapy (RMT) on the verbal, nonverbal and social aspects of communication with 24 children diagnosed with ASD. RMT uses improvised activities with a focus on interacting in the music with clients. These activities provide opportunities for children to use their relationship with and active participation in the music to express their potentials and difficulties. This newly formed relationship suggests a beneficial form of interaction with others that provides children with another form of relating to their surrounding environment. The implication is that music experiences enhanced relationships between the parents, professionals, and children within a school setting. This study highlights the

importance of music therapy acting as a catalyst to improve the various interpersonal dynamics between children and all who work with them.

Through the examination of 48 students with ASD, aged 4 to 7 years old, and their participation in improvisational music therapy (IMT) sessions in low-intensity (once a week, n=23), or high intensity (three times a week, n=25) doses, Mössler et al. (2017) determined that the therapeutic relationship can, in fact, "predict generalized clinical change of symptom severity" (p. 8). These may be generalizable for students with special needs. The efforts of the music therapist and the inherent mutual relational process that takes shape in music therapy can help a child with special needs to communicate more effectively.

McFerran, Thompson, and Bolger (2016) conducted an action research study in order to discover the feasibility of professionals using music therapy practices within their special education classrooms. Throughout the interviewing process and careful analyses of the data, it was found that teachers and students formed a relationship-oriented use of music which was rewarding for staff. It is this relationship that allows teachers to discover the ways in which students respond to music in order to meet their needs. Once engaged in this relationship, the direct influence of music therapy interventions on the social skills of students becomes apparent.

Kim, Wigram, and Gold (2008) described the use of musical attunement as the musical foundation between therapist and child, which utilizes aspects of improvised music to match the child's rhythmic pulse, rhythms, and melodic contour. Although these musical features are formed by the therapist, the music is creating the child's newly presented opportunity to interact with the therapist and the music. Kalas (2012) states that music's specific "musical elements facilitate the perceptual organization of auditory stimuli," which result in favorable effects for

children (p. 434). This speaks to the intricacies of music and its potential to influence and initiate the therapeutic process. Feedback from teachers involved indicated that music provided a medium for students to have control and find more enjoyment in the school learning process.

Jellison (2000) conducted a systematic review of the application of music in special education with disabled and nondisabled children and youth. She comprehensively reviewed research (n=148) that dated from 1975 to 1999. Music therapy was found to have benefits in the treatment of social skills in the form of a stimulus cue/prompt or structured activity. Music stimulus and activities provided opportunities for greater social interaction, improvements in social behavior and skills, and increased positive interactions among peers. Pasiali and Clark (2018) concluded that music therapy experiences resulted in improvements in social skills in students with limited resources.

There are many factors that influence the development of joint attention skills such as attention regulation, imitation, and monitoring self and others (Kalas, 2012). Walworth (2007) noted that music's function for sending multisensory cues allows the senses to become engaged and, as a result, attention is focused.

McFerran, Crooke, and Bolger (2017) studied the impact of four music therapy programs on the engagement of school children in typical and special education settings (n=26) in Australia. They discovered four types of engagement as a result, peer engagement being one type. Throughout each music therapy program, peer engagement took shape in different ways. Analysis of teacher interviews indicated that students began to know and trust one another better through participation in musical activities (McFerran et al., 2017). This form of engagement also enhanced authentic emotional expression between peers. Music therapists who enhance peer

engagement can inherently support positive forms of emotional expression at the same time. McFerran et al. (2016) provided additional research to support the effect of music on improving engagement. Amongst their findings, they stated that music has the motivational power to initiate interactions between students. It prolongs engagement and is an engaging age-appropriate means for initiating learning, and the structure and flexibility of music therapy sessions positively impact student engagement. Ross's (2016) study also indicated that, after students participated in music therapy, teachers found carry-over into the classrooms where students were more positively engaged in their education.

Furthermore, music therapy services are known for improving interpersonal skills. Vries et al. (2015) found from their systematic review that music therapy experiences help as a therapeutic intervention to improve social skills, specifically, social responsiveness. Boster, McCarthy, and Begnigno (2017) also provide support from their findings noting improvements in social interactions through the use of therapeutic music interventions.

LaGasse (2014) directed a study that focused on music therapy's impact on the social skills of 17 children, ages 6 to 9 years old, who were diagnosed with ASD. Participants were randomly assigned to either the music therapy group or the no-music social skills group. It was found that after five weeks the 50-minute group music therapy sessions presented significant improvements in joint attention as it related to attention to peers and eye gaze towards others.

Kim et al. (2008) provide further research in the improvement of joint attention for children with ASD through participation in IMT. Pre-school children were randomly added to either an IMT group or a play session group. Repeated measures analyses concluded that IMT group sessions are significantly more effective in promoting joint attention behaviors. In

reference to this study, joint attention was defined as "an interactive state of joint engagement that involves the child, the therapist, and objects or events in either musical for, or in play" (Kim et al., 2008, p. 1759). Researchers noted that the therapist's improvisational interaction with the child often enhances joint attention which then transforms into musical engagement.

Occasionally, the child will initiate further interaction instead of the therapist. This can become a

Occasionally, the child will initiate further interaction instead of the therapist. This can become a learned skill throughout their lifetime.

Kalas (2012) provided further evidence of music therapy's impact on the joint attention skills of children with ASD. She affirmed that the effects of music for children with ASD are due to "specific musical elements that facilitate the perceptual organization of auditory stimuli" (Kalas, 2012, p. 434). This study assessed the effects of simple versus complex music on joint attention. Results indicated that simple music is more likely to elicit responses to joint attention for children diagnosed with severe ASD. Joint attention skills were defined as attention regulation, imitation, and monitoring oneself and others. The study also highlighted the tendency for children with mild to moderate ASD, who engaged with complex music, to present greater responses to joint attention when compared to simple music. This indicates that the types of music that music therapists utilize with children on the spectrum impacts their ability to produce positive results in facilitating joint attention skills.

# **Music Therapy and Emotional Needs**

According to Davis, Gfeller, and Thaut (2008), "music offers the reluctant student a safe environment in which to explore emotions" (p. 422). Almost all students respond to music (Davis et al., 2008), and discovering the way in which they do may help music therapists elicit positive forms of emotion regulation and expression through music therapy. James et al. (2015)

systematic review results indicated enhancement in understanding emotions and improving independent functioning through music therapy.

Giles, Cogan, and Cox (1991) organized a study that utilized a music and art program to alter negative moods of 255 first and second grade children over the course of 11 days. While in a homeroom class children listened to three styles of music and drew freestyle drawings. The results indicated that the use of music listening in a classroom setting can be beneficial for improving students' emotional states. This supports Adamek and Darrow (2018) who state that listening to preferred music can result in positive changes in mood. Giles et al. (1991) concluded that students who may be at risk for emotional disorders may need longer involvement in the music and art program in order for sufficient benefits to be obtained.

Emotional states can also be improved through the use of drumming (Montello & Coons, 1998, Wölfl, 2016). Wölfl's (2016) article, outlined above, explained that the act of improvisational drumming and verbal forms of self-expression can provide opportunities for students to express their emotions. As a result, students can experience positive feeling states. When students feel like they are a part of the group improvisation, their self-confidence is enhanced. Montello and Coons (1998) also determined that rhythm-based music therapy could facilitate the process of self-expression in pre adolescent school children who they defined as "emotionally distrubed" (Montello & Coons, 1998, p. 49).

William (2018) reviewed the use of rhythmic movement activities in improving self-regulation in childhood classroom settings. She stated that rhythmic movement activities have "strong promise" in providing children in early childhood settings with self-regulatory strategies which include emotion regulation (Williams, 2018, p. 97).

Kivland (1986) examined the use of individual music therapy sessions to improve a young boy's negative feelings of self-esteem. Music therapy sessions were structured over a 12-week period to address the 12-year old boy's diagnosis of conduct disorder. Through careful observation measurements of the boy's progress, Kivland (1986) noticed a decrease in negative self-statements and, when prompted, an increase in acceptance of positive self-statements. The boy was also able to independently identify his successes within music therapy sessions which later was applied to other disciplines.

Porter et al. (2017) organized a randomized controlled trial that analyzed the effectiveness of music therapy as an intervention to treat adolescents with mental health needs. In Northern Ireland, a total of 181 young participants, ages 8 to 16 years old, with social, emotional, behavioral and developmental difficulties were provided either 12 weeks of music therapy sessions plus their usual care (n = 76 in final analyses) or usual care alone (n = 105 in final analyses). Results indicated greater improvements in self-esteem, depression, and family functioning within the music therapy group rather than the usual care group did.

## **Music Therapy and Communication Needs**

Adamek and Darrow (2018) state that "music therapy can help students develop, practice, and improve communication skills" (p. 239). Music experiences encourage students to interact with one another as well as to make decisions and listen to each other. Children of all ages and abilities communicate both verbally or nonverbally. Music, like language, is a form of communication that supports forms of expression, both verbal and nonverbal (Mössler et al., 2017). Meaningful interaction within the music on a non-verbal level strengthens a child's

communicative abilities. This unique music therapy setting offers more opportunities to develop communication skills (Walworth, 2007).

Communication skills may improve through the use of music therapy interventions that encourage expressive and receptive language (Davis et al., 2008). Davis et al. (2008) provide examples of interventions such as call-and-response, action songs, instrument playing, and chants. In de Mers et al. (2009) study, students learned to ask questions appropriately after engaging in music activities. This provides evidence that children with special needs who engage in music therapy can enhance communication skills in a school setting.

In addition, Mendelson et al. (2016) formulated a pilot study to help students with disabilities improve their communication skills (n=36) through engagement in a music therapy program. Within the study, students were randomly selected to either the short-term (seven weeks, n=17) or long-term (15 weeks, n=14) music therapy model, *Voices Together*. The data analysis through the use of ANOVAs statistical significance that the longer duration of treatment through *Voices Together* may promote improvements in communication skills. Data analyses also concluded that no statistical significance was found within the short-term exposure group. This substantiates that longer engagement in music therapy may affect the outcomes of treatment goals. Mendelson et al. (2016) further asserted that children in special needs classrooms that receive music-based interventions will achieve increased communication skills.

One characteristic of ASD is the impairment of social communication (Brondino et al. 2015). According to Dimitriadis and Smeijsters (2011), "any kind of sound may be used in order to establish communication channels with a withdrawn or isolated autistic individual" (p. 119). This suggests one potential impact that music therapy can have on children with ASD.

A meta-analysis by James et al. (2015) investigated 12 studies related to the use of music therapy for individuals with ASD, aged 3 to 38 years old, in order to reveal potential benefits of music therapy. Their analysis of the randomized and quasi-randomized studies offered sufficient data to establish that music therapy provided positive outcomes in improving verbal communication, social interaction, and other areas. A subsequent meta-analysis of 11 studies (Li, 2016) provided greater supportive evidence that music therapy was especially beneficial for improving nonverbal communication skills in children with ASD (d = 0.67). Li (2016) also determined that music therapy was also beneficial for the improvement of verbal communication with a significant medium effect size (d = 0.55).

It is clear that music therapy provides a wide variety of benefits for children and adolescents with special needs. While some benefits are specific to clinical needs, other benefits are universal. As a resource for children and adolescents in a special education setting, music is unique in many ways and can positively impact these students' lives. Table 1 provides a reference for benefits of music therapy and the studies that found positive results.

#### ACTION THROUGH MUSIC: A RESOURCE FOR CHANGE

Table 1

Benefits of Music therapy as They Pertain to Student Needs

Benefits	Scholarly Sources		
<b>Music Therapy and Behavioral Needs</b>	1.Adamek & Darrow (2018)	2.Choi, Lee, & Lee (2010)	
	3.de Mers et al. (2009)	4.Montello & Coons (1998)	
	5.Pasiali and Clark (2018)	6.Ross (2016)	
	7.See (2012)	8.Wölfl (2016)	
Music Therapy and Social Needs	1.Adamek & Darrow (2018)	2.Boster et al. (2017)	
	3. Davis et al. (2008)	4.Jellison (2000)	
	5.Kalas (2012)	6.Kim et al. (2008)	
	7.LaGasse (2014)	8.McFerran et al. (2016)	
	9.McFerran et al. (2017)	10.Mössler et al. (2017)	
	11.Pasiali & Clark (2018)	12.Ross (2016)	
	13.Vries et al. (2015)	14.Walworth (2007)	
<b>Music Therapy and Emotional Needs</b>	1.Adameck & Darrow (2018)	2. Davis et al. (2008)	
	3.Giles et al. (1991)	4.Kivland (1986)	
	5.Montello & Coons (1998)	6.Porter et al. (2017)	
	7.Williams (2018)	8.Wölfl (2016)	
<b>Music Therapy and Communication</b>	1.Adamek & Darrow (2018)	2.Brondino et al. (2015)	
Needs	3.Davis et al. (2008)	4.de Mers et al. (2009)	
	5.Dimitriadis & Smeijsters (2011)	6.Mendelson et al. (2016)	
	7.Mössler et al. (2017)	8.Gattino et al. (2011)	
	9.James et al. (2015)	10.Li (2016)	
	11.Walworth (2007)		

# **Proposed Music Therapy Program**

A music therapy program at Ulster BOCES will provide students with new experiences that can be tailored to their therapeutic, educational, and developmental needs, ensuring both academic success and fulfillment of their present life goals. It is clearly evident from the research that music therapy can positively impact the lives of students with special needs and this program proposal is a voice to reach such goals.

This program, *Action Through Music: A Resource for Change*, is designed to provide students within Ulster BOCES Special Education program music therapy experiences that fulfill

goals related to any of their current needs. The Ulster BOCES Special Education program operates under a school-based management model. A school-based management model gives the school jurisdiction over several important components which include budget, staff allocation, hiring practices, program direction, and terms of service (Wilson, 2002). Under this model, the music therapist can conduct treatment, assessment, evaluation, and goal tracking independently as long as they are providing documentation for Ulster BOCES Special Education that clearly states the need for service and proof of progress as a result of music therapy services.

Because the music therapist will be operating under the school-based management model outlined above, all forms of documentation will be presented at this level of depth. In this framework, the music therapist will provide a broader spectrum of services for students. Music therapy will be viewed as *a way* to achieve goals that correspond to student needs, not *the way*.

#### **Program Details**

In *Action Through Music: A Resource for Change*, music therapy will be provided by a music therapist in the form of group or individual sessions throughout a typical school day. Sessions will be tailored to meet the diverse needs of all Ulster BOCES Special Education students. Experiences within these settings will be designed to achieve goals with students who meet participation criteria. The music therapist will be applying an integral approach in every session as well as leading resource-oriented uses of music within some of the groups.

Alternating group and individual activities, interventions and goals will be determined based on group feedback (if feasible), clinical observation, a change in needs, or rate of progression in fulfilling established goals. Consultation may stem from observations made by the music therapist, an initial music interaction, or from other staff members/team affiliates who

refer students to the music therapist directly. Below, Table 2 presents a tentative weekly schedule that provides a range of diverse opportunities for students throughout the week and allows sufficient time for both therapy, session planning, and documentation. To elaborate, "Staff Engagement" will be defined as a time in which the music therapist will gather new referrals and insight about students as it pertains to treatment, assessment, and termination.

# ACTION THROUGH MUSIC: A RESOURCE FOR CHANGE

Table 2

Tentative Weekly Schedule

Time	Monday	Tuesday	Wednesday	Thursday	Friday
7:30-8:15am	Session Prep/Staff Engagement	Session Prep/Staff Engagement	Session Prep/Staff Engagement	Session Prep/Staff Engagement	Session Prep/Staff Engagement
8:15-8:30am	Meet & Greet	Session Prep	Meet & Greet	Session Prep	Meet & Greet
8:30-9:00am	Individual Session	Music &	Individual Session	Drumming Group	Individual Session
9:00-9:30am	Individual Session	Movement	Individual Session		Individual Session
9:30-9:45am	Documentation	Documentation	Documentation	Documentation	Documentation
9:45-10:00am	Session Prep				
10:00-10:30am	Music Activity Group	Individual Session	Music Expression Group	Individual Session	Music & Movement
10:30-11:00am		Individual Session		Individual Session	
11:00-11:30am	Documentation	Documentation	Documentation	Documentation	Documentation
11:30-12:00pm	Lunch	Lunch	Lunch	Lunch	Lunch
12:00-12:40pm	Staff Engagement	Staff Engagement	Staff Engagement	Staff Engagement	Staff Engagement
12:45-1:15pm	Individual Session	Music	Individual Session	Music Performance Group	Individual Session
1:15-1:45pm	Individual Session	Performance Group	Individual Session		Individual Session
2:00-3:00pm	Documentation and Next Day				
	Session Prep				

# **Group Sessions**

Goal tracking within groups will be recorded through comprehensive notes that explain the purpose of the group, describe foreseen achievements, and describe the group's overall experiences with the addition to sub-descriptions of each student's participation and growth (Appendix B). If applicable, the music therapist will also record progression data for students who also have individualized goals. Observations made by the music therapist and by teachers outside of group sessions will help determine if students are making progress in music therapy (Appendix C). The possible goals outlined below are assumed goals that may be most relevant for each group. These goals may transform and redevelop as a result of changes in group focus, group progression or discussion amongst group members.

#### **Music Activity Group**

*Description:* This group will emphasize social and communication skills. Through the use of re-creative techniques students with ASD will be immersed in a musical, activity-based environment where they share experiences with their peers.

*Materials:* Guitar, keyboard, a variety of percussive instruments, choirchimes, bass bars, and PBUZZs (simple wind instrument).

Participants: This group is most fitting for students with ASD, and others with needs in the social, behavioral, or communication domains. Ages may range from five and above, depending on their developmental level.

*Methods:* Instrumental and song re-creation, social story songs, and musical games and activities.

Possible Goals:

- 1. To improve attention
- 2. To increase creativity
- 3. To increase play
- 4. To enhance positive interactions between peers
- 5. To improve verbal/nonverbal communication skills
- 6. To enhance self-expression

# **Music Expression Group**

Description: This group will be designed to provide music as a resource to address needs within the emotional, social, cognitive, and behavioral domains. It will be offered in two separate groups; one for children and one for adolescents. The music therapist will facilitate a mixture of re-creative, compositional, improvisational, and receptive methods. This group provides potential for students to express themselves in an environment where music is an avenue for that expression and a container for emotional release.

*Materials:* Speaker, paper, pens and pencils, large dry erase board (markers, eraser), and a variety of instruments.

*Participants:* Adolescents with emotional, behavioral, and social, and cognitive needs. Cognitive processes will be clearly identified by the goals set in place.

*Methods:* Lyric analysis, songwriting, song improvisation, song re-creation, music listening, music relaxation, and song (lyric) discussion.

Possible Goals:

1. To enhance inter-intrapersonal skills

- 2. To develop emotion regulation
- 3. To increase self-esteem and self-expression
- 4. To decrease negative behavior
- 5. To stimulate relaxation
- 6. To enhance self-identity
- 7. To alter expressions of aggression

#### **Music & Movement**

Description: The music therapist will establish approaches to encourage movement through instrumental music and musical games and activities. The end goal is to provide students with a unique form of expression through movement that elicits fulfillment of group needs.

*Materials:* Speaker or amplifier, iPad with access to music selections, scarves, choirchimes, inflatable balls, sand bags, and a parachute.

*Participants:* Young children who have needs related to the physical, social, emotional, behavioral domains. Also, children with ASD and those with physical or cognitive needs that impact movement and coordination.

*Methods:* Re-creative and improvisational methods will be utilized. Methods would involve dancing to instrumental music, interacting with others through the use of scarves, a parachute, balls, and sand bags.

#### Possible Goals:

- 1. To increase gross and fine motor skills
- 2. To enhance hand-eye coordination
- 3. To increase socialization

4. To develop musical expressive freedom

5. To enhance decision-making skills

6. To enhance interpersonal skills

7. To enhance creativity and imagination

8. To increase connection between mind and body

**Community Performance Group** 

Description: This group will provide opportunities for group performances throughout

the year. Depending on the progress of the students, the music therapist may cycle between

different groups or alternate groups each week throughout the school year in order to give all

students an opportunity to participate. Any form of creative music performance will be

supported. One example may be sharing rhythms through the gathering drum while singing a

song. The music therapist will develop all ideas from students and create a cohesive performance

schedule in which parents and staff member will watch. This group will build or support

foundations in peer and staff relationships and change perceptions of students by giving all

students a literal and metaphorical voice that will resonate throughout the Ulster BOCES Special

Education community. All students, parents, and staff members may be involved with no music

experience needed.

*Materials:* Wide variety of instruments provided by music therapist or brought in by

students/parents.

Participants: All students within Ulster BOCES, parents, and staff members.

*Methods:* The music therapist will play a more instructional and supportive role in this group by guiding students on how to go about creating their performance. The music therapist may utilize song re-creation or improvisational methods to achieve this.

#### Possible Goals:

- 1. To increase peer interactions
- 2. To alter perceptions of students
- 3. To enhance student-teacher-parent relationships
- 4. To enhance self-esteem
- 5. To increase a sense of community and community cohesion
- 6. To develop creativity
- 7. To foster new relationships
- 8. To enhance socialization and interpersonal skills
- 9. To increase collaboration skills
- 10. To enhance awareness of resource tools

#### **Drumming Group**

Description: This group will only utilize percussion instruments in order to provide music as a different form of resource. Drumming provides a form of release that may reduce aggressive tendencies in young children and adolescents (Wölfl, 2016; Montello & Coons, 1998). It is an avenue for expressing feelings that may be difficult to describe in words. This music therapist aims to provide drumming activities that give students the means to express or relieve inner tension without following up with deep psychotherapeutic discussion. Drumming activities will be followed by a brief discussion about how the experience was for students

supported with short verbal expressions of how they currently feel. The music therapist will administer guidelines to prevent in-depth discussion that may elicit censored material.

*Materials:* Tubanos, djembes, gathering drum, buffalo drums, thunder tube, tambourines, agogo bell, ocean drum, shakers, claves, metallophone, frame drums, cabasa, and bass bars.

Participants: This group will pertain to adolescents with social, behavioral, and emotional needs who present with aggressive behaviors, high energy, low engagement, and poor emotion regulation.

*Methods:* The music therapist will utilize instructional, re-creative, compositional, and improvisational forms of drumming to elicit goals. These methods will incorporate characteristics specific to drumming such as call and response, echoing, rhythm imitation, alteration, and creation, and free and cooperative play.

#### Possible Goals:

- 1. To increase emotion regulation
- 2. To explore and develop forms of expression through music
- 3. To enhance inter- intrapersonal skills
- 4. To improve focus of attention
- 5. To identify values of music making and rhythm formation
- 6. To develop positive nonverbal forms of expression
- 7. To foster forms of resilience
- 8. To enhance awareness of music as a resource for change

#### **Individual Sessions**

The unique needs of each student may not be properly addressed within a group setting if they do not match with the goals of each group. For this reason individual music therapy sessions will be provided to address each need in a different way. The music therapist may also offer extended support for a student who is involved in a group. For example, if a student is struggling to learn a song in community choir, instead of utilizing group time to address that, the music therapist may meet with the student individually. The music therapist will be utilizing the same form of note taking as stated for group sessions and has created a different form for individual session context (see Appendix D). The same form of recording goal progression will also be utilized (see Appendix C)

The music therapist aims to utilize individualized sessions as an additional resource to address any need of the students that cannot otherwise be attended to in the group setting. The assessment form is provided in Appendix E.

## **Music Sanctuary**

The music therapist will need a large room in order to conduct group and individual sessions. There is potential for some sessions to occur within the classroom setting, but a room for music therapy is preferred. Over time, the music therapy room can become the "Music Sanctuary" where students and staff members can seek out the music therapist's support. If fulfillment of the initial expenses is fully met, the music therapist will also need storage for the equipment which will be absolutely necessary for the program. Finding a space large enough to hold instruments and provide enough space for sessions is ideal. It is requested that at least 12 armless chairs be supplied and a computer be available for documentation and staff

communication purposes. Necessary steps will be made to ensure proper confidentiality guidelines pertaining to student notes.

# **Larger Group Context**

In a larger context, this proposal provides Ulster BOCES with a fresh approach to treating the needs of their students. The new approach of utilizing music to accomplish goals provides students with a new environment that will enrich their lives. The music therapist's clinical experience in assessment and tracking goals and objectives and sharing these outcomes with other professionals will aid in building positive team relationships and enhance team collaboration. Another contribution to consider is that this music therapy program will be reintroducing the only formal use of music within the school whether it be recreational, educational, or clinical. For example, the community performance group provides a recreational setting that offers new forms of interaction through music to achieve targeted goals. There will be opportunities for the music therapist to collaborate with other professionals in meeting the needs of Ulster BOCES students (Adamek & Darrow, 2018; Davis et al., 2008). The music therapist can complement other therapy sessions to help achieve common goals.

#### **Outcomes and Assessment**

The music therapist will provide all staff members with referral forms (see Appendix F) to ensure that a formal procedure is followed. Termination of a student from either group or individual sessions will also be documented (see Appendix G) and stored on computer software with proper security measures.

#### **Financial Proposition**

Table 3 provides all pertinent information regarding the budget which includes salary and estimated benefits, initial expenses, and instrument maintenance expenditures. Salary request is in line with the average of the State of New York (AMTA, 2018). Establishing the music therapy program will require a significant financial investment. This is because purchasing high quality instruments greatly reduces the probability of future costs in maintenance and repair. Instruments of higher cost preserve longer than those of lower cost. This is an important consideration when examining the potential for students to damage instruments as a result of their functional level or possible behavioral outbursts. Following annual salary includes annual expenses, initial expenditures, and prospective expenditures.

Table 3

Budget

Annual Salary		
Item	Amount	
Full-time Music Therapist (AMTA, 2018)	\$53,000 - 55,000	
Health Ins. Deductions	\$1,500 - 1,850	
Estimated Benefits: (Health, Dental, Vision, Retirement) *Only accounts for individual health care benefits, not family*	\$20,000 - 30,000	
Total:	\$71,500 - 83,150	

<sup>\*</sup>Insurance information provided by Ulster BOCES human resources\*

Annual Expenses		
Item	Amount	
Instrument Maintenance/Repairs (may vary)	\$500	
AMTA Membership	\$250	
Regional Conference Registration Fee	\$380	
Total:	\$1,130	

Initial Expenditures		
Company	Instrument/Item Details	Price
West Music	Casio 76-Key Keyboard	\$299.99
Guitar Center	Acoustic Guitar: Fender FA-125 Dreadnought & Road Runner Gig Bag	\$194.98
Amazon	Bose Soundlink Color Bluetooth Speaker II	\$129.00
West Music	Studio 49 Soprano Metallophone	\$405.00

Table 3. Budget (continued)

West Music	Malmark 25 Note Choirchime set	\$1,125.00
West Music	Remo Health Rhythms Drum Collection  - Includes: 1 - 12" Key-tuned Tubano, 1 - 14" Key-tuned Tubano, 1 - 18" x 22" Gathering Drum, 2 - 10" Medium Festival Djembes, 2 - 3.5" x 12" Buffalo Drums, 1 - Set of Comfort Sound Technology Sound Shapes, 5 Piece Circle Pack (6", 8.25", 10.5", 12.75", 15"), 1 - 7" Thunder Tube, 2 - 10" Pretuned Tambourines, 1 - Valencia Series 3 Tone Agogo Bell, 1 - 16" Ocean Drum, 4 - Sets of 6 "fruit style" shakers, 1 - Guided Imagery Drumming Volume 1 CD, 2 - Sets of Maple Claves, & 1 - REMO Drum stick	\$2,423.40
West Music	Basic Beat Starter Pack: Includes: 1 - 12" Ocean Drum, 1 - 16" Rainstick, 1 - Mini size Cabasa, 6 - Egg Shakers in assorted colors, 1 - Set of 12 scarves (27"), 1 - 8" Tambourine with head, 1 - 10" Pre-tuned Frame Drum, 1 - 12" Pre-tuned Frame Drum, 3 - Pairs of Basic Beat Toddler Maracas in assorted colors, 1 - 6' Parachute, 1 - Soprano Kinder Glockenspiel, 6 - Wrist Bells in assorted colors, 1 - 8 ounce bottle of West Music Steri-Spray disinfecting spray, & 1 - Backpack style Carrying Bag	\$315.00
	Total:	\$4,892.37

Other Prospective Expenditures		
Company	Instrument/Item Details	Price
Amazon	VIZ PRO Dry Erase Board	\$56.80
Apple	iPad Air w/ 256GB	\$799.00
West Music	Music Stands (10)	\$329.50
West Music	PBUZZs (4): Adapted Trombones	\$119.80
West Music	Fender 40-Watt Amp	\$199.99
West Music	Fender PA System	\$429.99
West Music	Shure SM85 Microphone	\$104.00
West Music	Sonor Contrabass Bar: G	\$385.00

Table 3. Budget (continued)

West Music	Sonor Meisterklasse West-X: Bass Bar Set of 5	\$2,218.50
------------	---	------------

There may be opportunities for Ulster BOCES to receive grants as a means of funding for purchasing future instruments and enhancing the music therapy program. With the music therapist's efforts, there is potential to identify grant requirements and formulate requests for funding. After researching various requirements for successful completion, grant proposals are time consuming, but this program proposal may aid in diminishing the time it takes since its contents support the need for funding in order to provide adequate music therapy services for students at Ulster BOCES.

#### Conclusion

It is clear that *Action Through Music: A Resource for Change* can provide Ulster BOCES with a new clinical form of caring for their student's needs. Music therapy and the clinical use of music provides unique opportunities that foster new relationships, healing, and individualized and group associated goal achievement (Adamek & Darrow, 2018; Bruscia, 2014; Davis et al., 2008). As this program proposal outlines, music therapy for students within a special needs setting is beneficial in addressing the wide variety of needs. As a professional within the field of music therapy, I have seen firsthand the positive changes that music therapy can elicit in people. It is my hope that the administration of Ulster BOCES will consider the value of implementing *Action Through Music: A Resource for Change*, so that students may thrive not only academically, but also behaviorally, socially and emotionally for many years to come.

#### References

- Abrams, B. (2018). Understanding humanistic dimensions of music therapy: Editorial introduction. *Music Therapy Perspectives*, *36*(2), 139-143.
- Adameck, M. S., & Darrow, A. (Eds.). (2018). *Music in special education* (3<sup>nd</sup> ed.). Silver Spring, MD: The American Music Therapy Association, Inc.
- American Music Therapy Association. (2015). Fact sheet: Music therapy and autism spectrum disorder. Silver Spring, MD: American Music Therapy Association, Inc. Retrieved from <a href="https://www.musictherapy.org/assets/1/7/Fact\_Sheet\_ASD\_and\_MT\_8-26-15.pdf">https://www.musictherapy.org/assets/1/7/Fact\_Sheet\_ASD\_and\_MT\_8-26-15.pdf</a>
- American Music Therapy Association. (2018). 2018 AMTA member survey & workforce analysis. Silver Spring, MD: American Music Therapy Association, Inc. Retrieved from <a href="https://www.musictherapy.org/assets/1/7/18WorkforceAnalysis.pdf">https://www.musictherapy.org/assets/1/7/18WorkforceAnalysis.pdf</a>
- American Music Therapy Association. (2019a). Music therapy historical overview. Retrieved from <a href="https://www.musictherapy.org/about/music therapy historical review/">https://www.musictherapy.org/about/music therapy historical review/</a>
- American Music Therapy Association. (2019b). Definition and quotes about music therapy.

  Retrieved from <a href="https://www.musictherapy.org/about/quotes/">https://www.musictherapy.org/about/quotes/</a>
- Beutler, L. E., Malik, M., Alimohamed, S., Harwood, T. M., Talebi, H., Noble, S., & Wong, E. (2004). Therapist variables. In M. J. Lambert (Ed.), *Bergin and Garfield's handbook of psychotherapy and behavior change* (pp. 227–306). New York: Wiley.
- Boster, J. B., McCarthy, J. W., & Benigno, J. P. (2017). Music therapy is beneficial for children with autism spectrum disorders, but more specific clinical guidance is a future need.

  Evidence-Based Communication Assessment & Intervention, 11(1-2), 20-26.

- Brondino, N., Fusar-Poli, L., Rocchetti, M., Provenzani, U., Barale, F., & Politi, P. (2015)

  Complementary and alternative therapies for autism spectrum disorder. *Evidence-Based Complementary and Alternative Medicine*, 2015, 1-31.
- Bruscia, K. (2014). *Defining music therapy* (3<sup>rd</sup> ed.). University Park, IL: Barcelona Publishers.
- Carpente, J. (2018). Goal attainment scaling: A method for evaluating progress toward developmentally based music-centered treatment goals for children with autism spectrum disorder. *Music Therapy Perspectives*, *36*(2), 215-223.
- Certification Board for Music Therapists (2019). Code of professional practice. Retrieved from <a href="https://www.cbmt.org/about-certification/code-of-professional-practice/">https://www.cbmt.org/about-certification/code-of-professional-practice/</a>
- Choi, A. N., Lee, M. S., & Lee, J. S. (2010). Group music intervention reduces aggression and improves self-esteem in children with highly aggressive behavior: A pilot controlled trial. *Evidence-Based Complementary & Alternative Medicine (ECAM)*, 7(2), 213–217. <a href="https://doi.org/10.1093/ecam/nem182">https://doi.org/10.1093/ecam/nem182</a>
- Cooper, M. (2008). Essential research findings in counselling and psychotherapy. The facts are friendly. London: Sage Publications.
- Davis, W. B. (1987). Music therapy in 19th century America. *Journal of Music Therapy*, 24(2), 76–87.
- Davis, W. B., Gfeller, K. E., & Thaut, M. H. (2008). *An introduction to music therapy: Theory and practice* (3rd. ed.). Silver Spring, MD: American Music Therapy Association, Inc.
- de Mers, C. L., Tincani, M., Van Norman, R. K., & Higgins, K. (2009). Effects of music therapy on young children's challenging behaviors: A case study. *Music Therapy Perspectives*, 27(2), 88–96. https://doi.org/10.1093/mtp/27.2.88

- Dimitriadis, T., & Smeijsters, H. (2011). Autistic spectrum disorder and music therapy: Theory underpinning practice. *Nordic Journal of Music Therapy*, 20(2), 108–122.
- Gattino, G. S., dos Santos Riesgo, R., Longo, D., Leite, J. C. L., & Faccini, L. S. (2011). Effects of relational music therapy on communication of children with autism: A randomized controlled study. *Nordic Journal of Music Therapy*, 20(2), 142–154.
- Geretsegger, M., Holck, U., Carpente, J. A., Elefant, C., Kim, J., & Gold, C. (2015). Common characteristics of improvisational approaches in music therapy for children with autism spectrum disorder: Developing treatment guidelines. *Journal of Music Therapy*, *52*(2), 258–281.
- Giles, M. M., Cogan, D., & Cox, C. (1991). A music and art program to promote emotional health in elementary school children. *Journal of Music Therapy*, 28(3), 135–148.

  Retrieved from

  <a href="https://search-ebscohost-com.libdatabase.newpaltz.edu/login.aspx?direct=true&db=eue&AN=61022863&site=ehost-live">https://search-ebscohost-com.libdatabase.newpaltz.edu/login.aspx?direct=true&db=eue&AN=61022863&site=ehost-live</a>
- Gold, C., Voracek, M., & Wigram, T. (2004). Effects of music therapy for children and adolescents with psychopathology: A meta-analysis. *Journal of Child Psychology & Psychiatry*, 45(6), 1054–1063. <a href="https://doi.org/10.1111/j.1469-7610.2004.t01-1-00298.x">https://doi.org/10.1111/j.1469-7610.2004.t01-1-00298.x</a>
- Goodman, L. A., Sullivan, C. M., Serrata, J., Perilla, J., Wilson, J. M., Fauci, J. E., & DiGiovanni, C. D. (2016). Development and validation of the trauma-informed practice scales. *Journal of Community Psychology, 44*, 747–764.

- Hayoung, A. L. (2010). Effect of "developmental speech and language training through music" on speech production in children with autism spectrum disorders. *Journal of Music Therapy*, 47(1), 2-26.
- James, R., Sigafoos, J., Green, V. A., Lancioni, G. E., O'Reilly, M. F., Lang, R., ... Marschik, P.
  B. (2015). Music therapy for individuals with autism spectrum disorder: A systematic review. *Journal of Autism and Developmental Disorders*, 2, 39-54.
- Jellison, J. A. (2000). A content analysis of music research with disabled children and youth (1975-1999): Applications in special education. In *Effectiveness of Music Therapy Procedures*. *Documentation of Research and Clinical Practice* (3rd ed., pp. 199-264). Silver Spring, MD: American Music Therapy Association, Inc.
- 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.
- Kern, P. (2011). Evidence-based practice in early childhood music therapy: A decision-making process. *Music Therapy Perspectives*, *29*(1), 91–98.
- Kim, J., Wigram T., & Gold C. (2008). The effects of improvisational music therapy on joint attention behaviors in autistic children: A randomized controlled study. *Journal of Autism and Developmental Disorders*. 38, 1758-1766.
- Kivland, M. J. (1986). The use of music to increase self-esteem in a conduct disordered adolescent. *Journal of Music Therapy*, *23*(1), 25–29. Retrieved from <a href="https://search-ebscohost-com.libdatabase.newpaltz.edu/login.aspx?direct=true&db=eue&AN=61022824&site=ehost-live">https://search-ebscohost-com.libdatabase.newpaltz.edu/login.aspx?direct=true&db=eue&AN=61022824&site=ehost-live</a>

- LaGasse, B. A. (2014). Effects of a music therapy group intervention on enhancing social skills in children with autism. *Journal of Music Therapy*, 51(3), 250-275.
- Li, M. (2016). The effectiveness of music therapy for children with autism spectrum disorder: A meta-analysis (Thesis). Available from Education Database. (1797415337). Retrieved from
  - https://libdatabase.newpaltz.edu/login?url=https://search-proquest-com.libdatabase.newpaltz.edu/docview/1797415337?accountid=12761
- McFerran, K. S., Thompson G., & Bolger, L. (2016). The impact of fostering relationships through music within a special school classroom for students with autism spectrum disorder: An action research study. *Educational Action Research*, 24(2), 241-259.
- McFerran, K. S., Crooke, A. H. D., & Bolger, L. (2017). Promoting engagement in school through tailored music programs. *International Journal of Education & the Arts, 18*(3), 1-28. Retrieved from

https://search-ebscohost-com.libdatabase.newpaltz.edu/login.aspx?direct=true&db=eric&

AN=EJ1131381&site=ehost-live

- Mendelson, J., White, Y., Hans, L., Adebari, R., Schmid, L., Riggsbee, J., ... Dawson, G. (2016).

  A preliminary investigation of a specialized music therapy model for children with disabilities delivered in a classroom setting. *Autism Research & Treatment*, 1–8.

  <a href="https://doi.org/10.1155/2016/1284790">https://doi.org/10.1155/2016/1284790</a>
- Montello, L., & Coons, E. E. (1998). Effects of active versus passive group music therapy on preadolescents with emotional, learning, and behavioral disorders. *Journal of Music Therapy*, *35*(1), 49–67. Retrieved from

#### ACTION THROUGH MUSIC: A RESOURCE FOR CHANGE

- https://search-ebscohost-com.libdatabase.newpaltz.edu/login.aspx?direct=true&db=eue& AN=61200812&site=ehost-live
- Mössler, K., Gold, C., Aßmus, J., Schumacher, K., Calvet, C., Reimer, S., ... Schmid, W. (2017).

  The therapeutic relationship as predictor of change in music therapy with young children with autism spectrum disorder. *Journal of Autism and Developmental Disorders*. doi: 10.1007/s10803-017-3306-y
- New York State Education Department (2019). Creative arts therapy license requirements.

  Retrieved from <a href="http://www.op.nysed.gov/prof/mhp/catlic.htm">http://www.op.nysed.gov/prof/mhp/catlic.htm</a>
- Pasiali, V. (2012). Resilience, music therapy, and human adaptation: Nurturing young children and families. *Nordic Journal of Music Therapy*, *21*(1), 36-56.
- Pasiali, V., & Clark, C. (2018). Evaluation of a music therapy social skills development program for youth with limited resources. *Journal of Music Therapy*, *55*(3), 280–308. https://doi.org/10.1093/jmt/thy007
- Pellitteri, J. (2000). Music therapy in the special education setting. *Journal of Educational and Psychological Consultation* 11(3-4), 379-391.
- Porter, S., McConnell, T., McLaughlin, K., Lynn, F., Cardwell, C., Braiden, H., ... Jack, K. (2017). Music therapy for children and adolescents with behavioural and emotional problems: A randomised controlled trial. *Journal of Child Psychology & Psychiatry*, *58*(5), 586–594.
- Ritter-Cantesanu, G. (2014). Music therapy and the IEP process. *Music Therapy Perspectives, 32*(2), 142–152.

- Rogers, C. R. (1957). Necessary and sufficient conditions of therapeutic personality change.

  \*\*Journal of Consulting Psychology, 21, 95–103. Retrieved from \*\*
  https://search-ebscohost-com.libdatabase.newpaltz.edu/login.aspx?direct=true&db=eue&

  AN=520249561&site=ehost-live
- Ross, S. (2016). Utilizing rhythm-based strategies to enhance self-expression and participation in students with emotional and behavioral issues: A pilot study. *Music Therapy*Perspectives, 34(1), 99-105.
- See, C. M. (2012). The use of music and movement therapy to modify behaviour of children with autism. *Pertanika Journal of Social Sciences & Humanities*, 20(4), 1103–1116.
- Ulster BOCES (2019). Special education. Retrieved from:

  <a href="https://www.ulsterboces.org/students-of-all-ages/special-education">https://www.ulsterboces.org/students-of-all-ages/special-education</a>
- Vries, D. D., Beck, T., Stacey, B., Winslow, K., & Meines, K. (2015). Music as a therapeutic intervention with autism: A systematic review of the literature. *Therapeutic Recreation Journal*, 49(3), 220-237.
- Walworth, D. D. (2007). The use of music therapy within the SCERTS model for children with autism spectrum disorder. *Journal of Music Therapy*, 44(1), 2-22.
- Whipple, J. (2004). Music in intervention for children and adolescents with autism: A meta-analysis. *Journal of Music Therapy*, 41(2), 90-106.
- Williams, K. E. (2018). Moving to the beat: Using music, rhythm, and movement to enhance self-regulation in early childhood classrooms. *International Journal of Early Childhood*, 50(1), 85–100. https://doi.org/10.1007/s13158-018-0215-y

## ACTION THROUGH MUSIC: A RESOURCE FOR CHANGE

- Wilson, B. L. (Ed.). (2002). *Models of music therapy interventions in school settings*. Silver Spring, MD: The American Music Therapy Association, Inc.
- Wölfl, A. (2016). DrumPower music for a better community in the classroom: Group music therapy programme for violence prevention, social integration and empowerment in schools suggestions from community music therapy approaches. *International Journal of Community Music*, *9*(1), 65–75. <a href="https://doi.org/10.1386/ijcm.9.1.65\_1">https://doi.org/10.1386/ijcm.9.1.65\_1</a>

## Appendix A

## Annotated Bibliography

- Boster, J. B., McCarthy, J. W., & Benigno, J. P. (2017). Music therapy is beneficial for children with autism spectrum disorders, but more specific clinical guidance is a future need. 

  Evidence-Based Communication Assessment & Intervention, 11(1-2), 20-26.

  This study reviewed the effects of music therapy on children with ASD through a systematic review and meta-analysis of compiled randomized controlled trials and clinical controlled trials. The age range for children with ASD was 2 to 9 years old. It was reported that the authors found significant results for all outcomes variables. They concluded that music therapy can positively improve social
- Choi, A. N., Lee, M. S., & Lee, J. S. (2010). Group music intervention reduces aggression and improves self-esteem in children with highly aggressive behavior: A pilot controlled trial. *Evidence-Based Complementary & Alternative Medicine (ECAM)*, 7(2), 213–217. <a href="https://doi.org/10.1093/ecam/nem182">https://doi.org/10.1093/ecam/nem182</a>

interaction, communication, and parent-child relationships.

This pilot controlled trial examined the effects of group music therapy on 48 South Korean children, ages 10 to 11, with sessions occurring twice a week for 15 weeks. Children were split into the music therapy group (n=24) and the control group (n=24). Data was collected through the use of an assessment inventory and self-esteem scale that analyzed using Mann-Whitney's *U*-tests. Results indicated that group music therapy provided significant changes in students such as a decrease in aggressiveness, and improvement in self-confidence.

de Mers, C. L., Tincani, M., Van Norman, R. K., & Higgins, K. (2009). Effects of music therapy on young children's challenging behaviors: A case study. *Music Therapy Perspectives*, 27(2), 88–96. https://doi.org/10.1093/mtp/27.2.88

This case study examined the effectiveness of music therapy on three students in a special education setting with various diagnoses that include attention deficit hyperactivity disorder, obsessive-compulsive disorder, speech delay, and autism spectrum disorder. Students, aged 5 to 6 years old, demonstrated aggressive behaviors towards others and displayed inappropriate social behaviors. The authors aimed to decrease aggressive behavior and reinforce an alternate behavior: asking. After analyzing their checklist data, the authors determined that music therapy improved behavioral outcomes and encouraged an appropriate social behavior: asking. It was mentioned that results continued after three weeks from initial music therapy intervention.

Giles, M. M., Cogan, D., & Cox, C. (1991). A music and art program to promote emotional health in elementary school children. *Journal of Music Therapy*, 28(3), 135–148.

Retrieved from

https://search-ebscohost-com.libdatabase.newpaltz.edu/login.aspx?direct=true&db=eue& AN=61022863&site=ehost-live

This study explored the effectiveness of an 11-day music and art program on the emotional well-being of elementary school-aged children. Students were observed within three music settings while they drew freestyle drawings. After analyzing the first and second grade children's drawings and utilizing a mixed repeated

measures tool for other data analysis, the authors revealed that the use of new age music was most effective in altering mood. The authors discuss further implications.

Kivland, M. J. (1986). The use of music to increase self-esteem in a conduct disordered adolescent. *Journal of Music Therapy*, *23*(1), 25–29. Retrieved from <a href="https://search-ebscohost-com.libdatabase.newpaltz.edu/login.aspx?direct=true&db=eue&AN=61022824&site=ehost-live">https://search-ebscohost-com.libdatabase.newpaltz.edu/login.aspx?direct=true&db=eue&AN=61022824&site=ehost-live</a>

This case study investigated the effect of individual music therapy sessions on the self-esteem of a 12-year old boy who was diagnosed with conduct disorder. Following 12 weeks of music therapy, the author provides an in-depth examination of the boy's progress. The author notes key points in the boy's progress and determines that music therapy was effective in increasing his self-esteem.

James, R., Sigafoos, J., Green, V. A., Lancioni, G. E., O'Reilly, M. F., Lang, R., ... Marschik, P.
B. (2015). Music therapy for individuals with autism spectrum disorder: A systematic review. *Journal of Autism and Developmental Disorders*, 2, 39-54.

This systematic review aimed to determine the efficiency of twelve music therapy studies that utilized randomized or quasi-randomized forms of experimental design in the investigation of music therapy for individuals with ASD; in majority of studies participants were aged 3 to 5 years old. The studies involved investigation of the use of music therapy as a tool to address nonmusical goals such as decreasing undesirable behavior, promoting social interaction, improving independent

function, enhancing understanding of emotions, and increasing communication. It was noted that the studies mainly used two approaches to music therapy which include the use of certain songs with lyrics related to the target skill or clinical improvisation. Results presented that outcomes were positive for 58% of the studies, concluding that there is adequate evidence, from past positive outcomes, to state that music therapy may be a promising intervention for individuals with ASD.

Jellison, J. A. (2000). A content analysis of music research with disabled children and youth (1975-1999): Applications in special education. In *Effectiveness of Music Therapy*Procedures. Documentation of Research and Clinical Practice (3rd ed., pp. 199-264).

Silver Spring, MD: American Music Therapy Association, Inc.

This systematic review examined the efficacy of music therapy through the use of 148 different studies that recorded the use of music with children with special needs. The studies that were collected spanned from 1975 to 1999 and focused on music's impact on various important domains. After rigorously analyzing all of the studies, the author determined that music therapy was effective in improving social skills when utilized in the form of a cue/prompt or as a structured activity. The author concluded with strategic recommendations for professionals to take into consideration when addressing the needs of children in special education.

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.

This study examined the effects on joint attention of 30 children, with various degrees of ASD, after experiencing various complex and simple music conditions. Over the course of three weeks, participants, aged 4 to 6 years old, engaged in six different music conditions; three simple, and three complex. The author describes, in detail, the various music conditions including the use of an ocean drum, keyboard, gathering drum, and resonator bell. Analyzed through ANOVAs, results indicated that children with severe ASD appeared to respond better to simple music in order for effective responses in joint attention, while children with mild to moderate functioning responded better to complex music conditions, holding statistical significance between music condition and level of functioning.

Kim, J., Wigram T., & Gold C. (2008). The effects of improvisational music therapy on joint attention behaviors in autistic children: A randomized controlled study. *Journal of Autism and Developmental Disorders*. 38, 1758-1766.

This randomized control study explored the effects of improvisational music therapy, IMT, on joint attention of ten pre-school children with ASD, ages 3 to 5 years old. Twenty-four sessions were conducted over 12 weeks in 30-minute durations. Through repeated measures comparative research and session analyses between IMT (n=5) and a control condition of playing with toys (n=5), the data revealed that IMT facilitated significant improvements in joint attention skills such as longer turn-taking duration, eye contact and alternating eye contact, and social interaction. Due to the decline in sample size as a result of sudden health reasons, the measures of the ANOVAS did not uncover statistically significant results.

LaGasse, B. A. (2014). Effects of a music therapy group intervention on enhancing social skills in children with autism. *Journal of Music Therapy*, *51*(3), 250-275.

This study recorded the significance of 50-minute music therapy group sessions on the social skills of 17 children, ages 6 to 9 years old, who were diagnosed with ASD. Session occurred over a five-week period. Children were randomly assigned to either the music therapy group (n=9) or the no-music social group (n=8). The data revealed significant differences for joint attention with peers and eye gaze between towards peers between the two groups. The author concluded with recommendations for future studies and the need for more research.

Li, M. (2016). The effectiveness of music therapy for children with autism spectrum disorder: A meta-analysis (Thesis). Available from Education Database. (1797415337). Retrieved from

https://libdatabase.newpaltz.edu/login?url=https://search-proquest-com.libdatabase.newpaltz.edu/docview/1797415337?accountid=12761

This thesis in the form of a meta-analysis was formulated through the use of 11 studies in order to determine the effectiveness of music therapy for children with ASD. Following rigorous methods of compiling the data, this review found several statistically significant results in the efficacy of music therapy. This investigation inferred that music therapy was beneficial in the treatment for children with ASD; especially for improving nonverbal and verbal communication (d = .67, d = .55) in children with ASD. This analysis also concluded that the younger the age, the more significant the impact of treatment is. Due to the small amount of studies,

other results were not statistically significant. Limitations and recommendations for future research were then discussed.

McFerran, K. S., Thompson G., & Bolger, L. (2016). The impact of fostering relationships through music within a special school classroom for students with autism spectrum disorder: An action research study. *Educational Action Research*, 24(2), 241-259.

This action research study sought to discover the feasibility of professionals using specific music therapy practices in their special education classrooms with guidance from a music therapist. This study also explored the possible expansion of music's role in a school. Through various cycles, the music therapist engaged with professionals, teaching them adaptive music therapy strategies specific to the needs of their students. Through surveys and interviews, results indicated positive outcomes for both students and staff. Activities utilized included singing the names of learners in the class, body percussion, microphone songs, call-and-responses on drums, vocal imitation, big drum sensory, changing the words of songs, and making up song commentaries.

McFerran, K. S., Crooke, A. H. D., & Bolger, L. (2017). Promoting engagement in school through tailored music programs. *International Journal of Education & the Arts*, 18(3), 1-28. Retrieved from

https://search-ebscohost-com.libdatabase.newpaltz.edu/login.aspx?direct=true&db=eric& AN=EJ1131381&site=ehost-live

This paper examined the effects that a music therapy program had on both typical children and children in special education. The authors established four music

therapy programs that focused on engagement. Four forms of engagement were revealed through observational descriptions offered by adults and staff interviews within each setting. In their discussion it was determined that music therapy programs can make a unique contribution within a school setting and foster new relationships amongst students and community members.

Mendelson, J., White, Y., Hans, L., Adebari, R., Schmid, L., Riggsbee, ... Dawson, G. (2016). A preliminary investigation of a specialized music therapy model for children with disabilities delivered in a classroom setting. *Autism Research & Treatment*, (1–8). https://doi.org/10.1155/2016/1284790

This pilot study pursued improvements in communication skills, through *Voices Together* music therapy sessions, with five children who were diagnosed with ASD, and 32 children who had intellectual disabilities. By recording live observations of the 45-minute sessions over 15 weeks, findings suggested that music therapy may promote improvements in verbal responsiveness in a classroom setting. The *Voices Together* model incorporated specific techniques that encouraged communication and reciprocation. Students engaged in a Hello song, Feelings song, and a Topic Song. Sessions over 7 weeks did not find significant results, whereas, exposure to long-term music therapy sessions did.

Montello, L., & Coons, E. E. (1998). Effects of active versus passive group music therapy on preadolescents with emotional, learning, and behavioral disorders. *Journal of Music Therapy*, *35*(1), 49–67. Retrieved from

https://search-ebscohost-com.libdatabase.newpaltz.edu/login.aspx?direct=true&db=eue& AN=61200812&site=ehost-live

This study examined the effectiveness of both active and passive music therapy sessions on behavior in 16 preadolescent children with emotional, learning, and behavioral disorders. Students were separated into two different active music therapy groups while others were separated into a passive music listening group. Active music therapy groups consisted of drum training and improvisational drumming interventions. After conducting 12 music therapy sessions over a four-week period, children swapped from active music therapy to passive music therapy and vice versa. Through the use of several measurements to record data, results indicated improvements in self-expression and decreased aggressive behavior.

The researchers concluded that best results were achieved when children transitioned from a passive form of music therapy to an active form of music therapy. Study concludes with recommendations.

Mössler, K., Gold, C., Aßmus, J., Schumacher, K., Calvet, C., Reimer, S., ... Schmid, W. (2017).

The therapeutic relationship as predictor of change in music therapy with young children with autism spectrum disorder. *Journal of Autism and Developmental Disorders*. doi: 10.1007/s10803-017-3306-y

This study determined whether or not the therapeutic relationship in music therapy with 48 children, aged 4 to 7 years old with ASD, could predict generalizable changes in social skills. Participants were randomly separated into a low-intensity (once a week, n=23) or a high-intensity (three times a week, n=25) music therapy group,

utilizing an improvisational approach. The observable characteristics of the therapeutic relationship were assessed utilizing standardized tools. Results indicated that the therapeutic relationship does in fact predict generalized clinical changes in social skills, language, and communication. This study also provided guidance for clinical implications and gave music therapists suggestions for future research.

Pasiali, V., & Clark, C. (2018). Evaluation of a music therapy social skills development program for youth with limited resources. *Journal of Music Therapy*, *55*(3), 280–308. https://doi.org/10.1093/jmt/thy007

This study provided a music therapy social skills development program to 20 students with limited resources within a school. Utilizing a single-group pre/post-test design, 50-minute music therapy sessions were conducted over eight weeks. The study used several forms of measurement for data analysis: Home and Community Social Behavioral Scale, Social Skills Improvement System, and teacher interviews. Following paired *t*-test data analysis, the results showed that various music therapy interventions have the potential to be effective in promoting social functioning and communication, teaching skills, and improving upon low-performance/high-risk and problem behaviors.

Porter, S., McConnell, T., McLaughlin, K., Lynn, F., Cardwell, C., Braiden, H., ... Jack, K. (2017). Music therapy for children and adolescents with behavioural and emotional problems: A randomised controlled trial. *Journal of Child Psychology & Psychiatry*, *58*(5), 586–594.

This randomized control trial in Northern Ireland investigated the efficacy of music therapy with children, aged 8 to 16 years old, with behavioral and emotional needs. Through statistical analyses of the 12 weekly sessions of music therapy and usual care (n=76), and usual care alone (n=105), significant, short-term, improvements in communication, self-esteem, and lowered depression scores were revealed. The authors noted that the results of this study speak to the potential music therapy may have in the treatment of children with behavioral and emotional needs. The authors indicated the need for further research in the future.

- See, C. M. (2012). The use of music and movement therapy to modify behaviour of children with autism. *Pertanika Journal of Social Sciences & Humanities*, 20(4), 1103–1116.
  - This article studied the effect of two types of music and movement interventions on behavior modification of 41 participants diagnosed with autism spectrum disorder; aged 2 to 22 years old. One-way ANOVA and T-tests revealed that music and movement therapy improved some of the behaviors of the participants. These behaviors included: restlessness, fidgeting, temper tantrums, and inattentive behavior.
- Vries, D. D., Beck, T., Stacey, B., Winslow, K., & Meines, K. (2015). Music as a therapeutic intervention with autism: A systematic review of the literature. *Therapeutic Recreation Journal*, 49(3), 220-237.
  - This systematic review of literature focused on 15 studies related to children with ASD and outcomes of the therapeutic use of music. The aim of the review was to enhance the practice of music therapy. It was reported that therapeutic

interventions using music resulted in improvements in interpersonal, social, and cognitive skills. Benefits included, but were not limited to increased appropriate social behavior, increased attention to task, increased vocalization, verbalization, gesture, and vocabulary comprehension, increased communication and social skills, enhanced body awareness and coordination, improved self-care skills, and reduced anxiety. Studies utilized for these inferences were published in the 2000s.

Walworth, D. D. (2007). The use of music therapy within the SCERTS model for children with autism spectrum disorder. *Journal of Music Therapy*, 44(1), 2-22.

This article elaborated upon the use of the SCERTS model, an evidence-based, comprehensive curriculum that can be utilized to assess and identify treatment goals and objectives for children with ASD. It is expressed that the SCERTS model seeks to enhance the communication and socio-emotional functioning of children with ASD while also improving family interactions and support. This article was intended as a guide for music therapists who transition to SCERTS, while also providing knowledge about the potential benefits of music therapy and music stimuli. This article also received survey data from 21 music therapists to understand which music therapy assessment tools were being utilized in the field. Data revealed that there is a need for more music therapists to be recording progress through the SCERTS model.

Whipple, J. (2004). Music in intervention for children and adolescents with autism: A meta-analysis. *Journal of Music Therapy*, 41(2), 90-106.

This meta-analysis examined nine quantitative studies comparing music with non-music environments during the treatment of children and adolescents with ASD. Results indicated a positive direction of all effects, inferring that the use of music was beneficial regardless of its purpose. This study declared that all uses of music in treatment has a relatively high effect. The researcher concluded with suggestions for researchers who conduct future studies.

Williams, K. E. (2018). Moving to the beat: Using music, rhythm, and movement to enhance self-regulation in early childhood classrooms. *International Journal of Early Childhood*, 50(1), 85–100. https://doi.org/10.1007/s13158-018-0215-y

This paper examined several studies to determine the effect of rhythm, music on preschool children's self-regulation. After identifying the significances and relationships within each study, some including music therapy, the author determined that rhythmic movement activities are effective in supporting the self-regulation of preschool aged children. The author concluded with greater specifics on what types of activities may provide positive results.

# ACTION THROUGH MUSIC: A RESOURCE FOR CHANGE

# Appendix B

# Group Session Note

Group Name: Location: Date:	
Time:	
# of Participants:	
Group Goal:	
Session Details/Significant Moments:	
	Sub-Notes
	Sub Trotes
Student Name:	
Observations:	

Appendix C

Goal Tracking

Student Name: LT Goal: ST Goal:

Objectives	Session date	Objective Completion	Comments

# ACTION THROUGH MUSIC: A RESOURCE FOR CHANGE

# Appendix D

## Individual Session Note

Student Name: Location: Date: Time:
Session Description:
Significant Moments:
Mentionable Progress:
Areas Requiring Growth:

## Appendix E

### Assessment

## Ulster BOCES Special Education Initial Music Therapy Assessment - Date here

Reason for Consult: Primary Diagnoses:			
			General Background:
Precautions: [ ] Yes If yes, describe:	[ ] No		
Behavioral:			
Emotional: Affect:			
Social/Communication: Interpersonal Skills: Peer Interaction:			
Physical:			
Cognitive:			
Musical:     Instruments/Activities:     Warm-Up/Contact Song     Voice:	:		
Description of the Music:			
Clinical Impression: Adaptive Supports:			
Treatment Plan:			
Long-Term Goal:			

Short-Term Goal:	
Objectives:	
1.	
2.	
3.	
Music Therapist: Ext.: If applicable	

ACTION THROUGH MUSIC: A RESOURCE FOR CHANGE

# Appendix F

## Referral Form

## **Music Therapy Referral Form**

Date:	
Student Name:	Age:
Diagnoses:	Functional Age:
Reason for Referral:	
Needs to be Addressed:	
General Interests/Hobbies:	
Music Interests:	
Comments/Concerns:	
Referrer:	
Confirmed Receipt by MT:	Date:

## Appendix G

## **Termination Form**

## **Music Therapy Termination Form**

Reason for Termination:					
Need Met:	Fully	Partially	Not at all		
Future Treatment Reco	ommendation(	s):			
*Music therapist keep	s all document	ation on file for	potential future u	ise*	
Signature Confirming Termination:				Date:	
Music Therapist Signature:				Date:	

## Appendix H

## Music Therapy Fact Sheet

#### What is music therapy?

Music therapy is a process in which a board-certified music therapist uses music interventions to develop relationships, accomplish goals, promote health, and create change.

#### Who can/do music therapists serve?

Music therapists provide services from infants in the NICU to aging adults in assisted living facilities. Through the guidance of a music therapist the use of music in a therapeutic way addressed a plethora of goals. Music therapy can address a range of goals from enhancing quality of life to improving speech production, all while utilizing music interventions to do so.

## Can anyone be a music therapist?

No. Music therapists have obtained a bachelor's degree or higher in music therapy from an accredited university and completed 1,200 hours of clinical training experiences throughout their education. Music therapists must become music therapy board certified (MT-BC) by taking an exam. In addition, music therapists in New York can obtain their creative arts licensure (LCAT) to provide a higher level of therapeutic services to clients. Music therapists are proficiencient in guitar, percussion, piano, and voice, as they are required competencies by the AMTA. Music therapists have specialized training in the use music as a therapeutic tool to provide services to others. They can utilize music *in* therapy or music *as* therapy to help clients reach goals.

How is music therapy different from other forms of therapy treatment?

There are many ways in which music therapy is different from other forms of treatment. To start, music therapists utilize music in or as therapy to accomplish nonmusical goals that are established with the client or parent/guardian. In some cases, music therapy has the unique ability of accomplishing goals without it feeling like therapy. Certain interventions provide a fun, activity-based environment that feels more like play, than therapy. Music therapists are experienced and trained to assess goal progression in these exclusive environments.

#### Do you need to be a musician in order to receive music therapy?

No, clients do not need any form of music education to engage in music therapy. Through assessment of their clients, music therapists determine what interventions may be suitable for clients, regardless of their experience in playing or making music. There are forms of music therapy in which the music is provided by the music therapist, while the client participates in a different way. For example, a child may move around the room to live music that the music therapist is playing.

#### What does a music therapy session look like?

Music therapists design sessions that are unique to each individual or group. Sessions are typically 30-60 minutes long. They take the form of individual or group sessions. In individual sessions one may expect to find a one-to-one interaction between client and music therapist to achieve individualized goals. In groups, the achievement of goals remains the same, but it's how those goals are achieved that make sessions diverse.

#### Appendix I

#### Resume

## **Edward Zifchak**

Cell: (845) 389-1727 zifchake1@hawkmail.newpaltz.edu

### **Career Focus**

Dedicated to becoming a well-rounded music therapist within the field.

## **Summary of Skills**

-Cooperative team member -Dedicated

-Quick learner -Excellent interpersonal skills

-Easy going -Problem solver

-Energetic -Well organized

## **Education/Coursework/Performance History**

Master of Science: Music Therapy, 2019

**SUNY New Paltz -** New Paltz, NY, United States

**Bachelor of Science: Contemporary Music Studies, 2016** 

**SUNY New Paltz** - New Paltz, NY, United States

**Associate of Science: Music, 2014** 

**Ulster County Community College - Stone Ridge, NY, United States** 

**Advanced Regents Diploma, 2012** 

Kingston High School- Kingston, NY, United States

## **Internship/Fieldwork/Practicum Placement History**

VA HVHCS (Veterans Affairs Hudson Valley Healthcare System) – Fall 2017- Spring 2018

• Led individual and group music therapy sessions for several veteran populations including aging adults, and acute and chronic psych.

# **Greens at Greenwich - Spring 2017 – Fall 2017**

• Led and co-led music therapy activities/experiences with aging adults in an assisted living facility.

# NCRBI (Northeast Center for Rehabilitation and Brain Injury) - Fall 2016 – Spring 2017

• Led individual music therapy experiences for adults with traumatic brain injuries.

# **HVCATS** (Hudson Valley Creative Arts Therapy Studio) - Spring 2015

• Observed and co-led individual music therapy experiences with adolescents diagnosed with ASD.

# **Trainings/Certifications/Affiliations**

• Mandated Reporter