EXAMINING THE POTENTIAL SIMILARITIES AND INFLUENCES OF STANLEY GREENSPAN’S DEVELOPMENTAL, INDIVIDUAL DIFFERENCES, RELATIONSHIP BASED (DIR)/FLOOR TIME MODEL AND MUSIC THERAPY IN THE TREATMENT OF CHILDREN WITH AUTISM SPECTRUM DISORDER

By

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Abstract

The purpose of this qualitative comparative case study was to explore the relationship between Stanley Greenspan’s DIR/Floortime Model and music therapy in the treatment of children diagnosed with Autism Spectrum Disorder (ASD). This topic was explored through the perspectives of four special education teachers who implement the DIR/Floortime model within their present classrooms at the agency where the researcher is employed as a music therapist. All of the selected teachers witnessed and experienced music therapy treatment for present and past students in both group and individual sessions. Each teacher participated in one individual interview with the researcher lasting 30 to 60 minutes. Each interview was transcribed by the researcher and analyzed for commonalities including key words and themes that were central to the research questions. The findings of this study indicated that the influences of music therapy treatment for children diagnosed with ASD are largely positive and have the potential to spur growth and development. According to the interviewed special education teachers, the qualities of music therapy that most aid their students to learn and grow include: “motivating”, “calming”, and “focusing.” In addition, the teachers largely recognized a strong connection between the methodology and philosophies of music therapy treatment and Greenspan’s DIR/ Floortime model. The keywords and themes that were addressed in discussing this were “following the child’s lead”, “motivation”, and “exploration.” Lastly, the process of conducting the study largely resulted in the researcher finding new awareness regarding the importance of interdisciplinary communication and collaboration.
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CHAPTER 1

INTRODUCTION

Autism Spectrum Disorder (ASD) is a developmental disability that has a profound impact on individuals with the diagnosis as well as the people that care for them on a daily basis (Allgood, 2005). According to the American Psychiatric Association (2000), ASD is a brain development disorder characterized by impairments in multiple developmental areas including social interaction and communication, and is also characterized by the presence of restrictive and repetitive behaviors. Treatment for children diagnosed with ASD is frequently a lifelong process that involves hours of intensive therapies in both one-to-one and group therapy sessions. One form of treatment that is frequently utilized for both children and adults diagnosed with ASD is music therapy. According to the American Music Therapy Association (2012):

Music Therapy is the clinical and evidence-based use of music interventions to accomplish individualized goals within a therapeutic relationship by a credentialed professional who has completed an approved music therapy program. It is a well-established allied health profession that uses music therapeutically to address behavioral, social, psychological, communicative, physical, sensory-motor, and/or cognitive functioning. Because music therapy is a powerful and non-threatening medium, unique outcomes are possible (Musictherapy.org). (See Appendix A)

Music therapy treatment for this population is a modality that has been implemented in the United States and abroad since the 1950s (Reschke-Hernandez, 2011). As the music therapy profession has evolved, developed, and expanded since it began in the early 1950s, so too has music therapy research and treatment for children diagnosed with ASD. Through extensive research on the effectiveness and influences of music therapy treatment for this population, many researchers have found music therapy treatment has the potential to stimulate improvement in various developmental areas including social/behavioral skills, (Allgood, 2005; Carpente, 2009; Kaplan & Steele, 2005; Kern & Aldridge, 2006) language/communication skills, (Allgood,
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2005; Carpente, 2009; Edgerton, 1994; Howat, 1995; Kaplan & Steele, 2005) cognitive skills, (Howat, 1995; Kaplan & Steele, 2005) musical skills, (Howat, 1995; Kaplan & Steele, 2005) and psychomotor skills (Howat, 1995; Kaplan & Steele, 2005). Researchers within many of these studies found that several of the children participating in music therapy displayed a strong motivation for music therapy interventions presented to them during treatment. Their willingness to interact with other sources outside of themselves primarily through musical stimuli aided in bringing many of these children away from an internal state of focus, to an external state of focus during music experiences.

Another treatment modality used with children diagnosed with ASD is Stanley Greenspan’s Developmental, Individual Differences, Relationship Based (DIR)/Floortime model for working with children with special needs.

The Developmental, Individual Difference, Relationship-based (DIR®/Floortime™) Model is a framework that helps clinicians, parents and educators conduct a comprehensive assessment and develop an intervention program tailored to the unique challenges and strengths of children with Autism Spectrum Disorders (ASD) and other developmental challenges. The objectives of the DIR®/Floortime™ Model are to build healthy foundations for social, emotional, and intellectual capacities rather than focusing on skills and isolated behaviors (Greenspan & Weider, 2007). {See appendix B}

This developmental approach, developed by physician Stanley Greenspan, focuses on building a strong foundation of emotional, intellectual, and social abilities within children with developmental disabilities (Greenspan & Weider, 2006). Similar to music therapy treatment, Greenspan’s approach to working with children diagnosed with ASD centers on meeting the child at his/her own developmental level and working with the child through interactive play with an emphasis on relationship development as well as offering unconditional positive regard to the child (Carpente, 2009). Unfortunately, due to the relatively short period of time that the DIR/Floortime model has been in use, there is presently a paucity of outcome studies that
explore the effectiveness of this model (Carpente, 2009). Researchers such as Mohoney and Perales (2003) focus on exploring relationship-based treatment for children with ASD, though they did not specifically use Greenspan’s DIR/Floortime model. Other researchers explored the influences of Greenspan’s DIR/Floortime model based on parents’ perceptions as well as parent implementation of the model (Coletti, 2012; DeWaay, 2012; Pajareya & Nopmaneejumruslers, 2011).

Therapists and teachers who use Stanley Greenspan’s DIR/Floortime model for working with children with autism/disabilities employ strategies and techniques that are similar to those employed in music therapy practice, and can complement each other when used together (Carpente, 2009). Similar to music therapists, therapists and teachers using the DIR/Floortime model emphasize the formulation of relationships with the child and strive to help the child master communicative and relational skills. Music therapy techniques greatly align with this philosophy of growth and development espoused by the DIR/Floortime model as both music therapists and DIR/Floortime professionals emphasize the importance of improvisation and play. Music therapists make use of musical stimuli as its source of play and exploration. Carpente (2009) is the only researcher to date that has explored and integrated both Greenspan’s DIR/Floortime model and music therapy treatment.

Purpose

The purpose of this qualitative comparative case study was to explore the relationship between Stanley Greenspan’s DIR/Floortime Model and music therapy in the treatment of children diagnosed with ASD. This topic was explored through the perspectives of four special education teachers employed at an agency located in Western New York who implement the DIR/Floortime model within their present classrooms. All of the selected teachers have
witnessed and experienced music therapy treatment for present and past students in both group and individual sessions. Data was collected through individual interviews.

**Theoretical Perspective**

As I have grown as a music therapist, my philosophical orientation can be identified as humanistic, client-centered (Rogers, 1977). The humanistic approach is positivistic and adheres to the idea that every person has the ability to live up to his/her full potential and grow as a human being. I feel that all people have the potential to become the best person they can possibly be and that as music therapists, we are given the privilege to assist clients through this process. This theory takes into account that all people are in different phases of development and betterment, and that we all have potential for growth. It also emphasizes the fact that our clients are not largely different from us, and that we are all in different phases of our own growth process. When applied to my own clients, I feel that my job as a music therapist is to offer Carl Roger’s definition of “unconditional positive regard” to help my clients reach their own full potential (Rogers, 1977). I am constantly attempting to move with my clients through the music and meet them where they are in their own process. By offering unconditional positive regard during sessions, I feel that I am providing a safe environment for clients to express themselves openly and freely within the therapeutic space. I believe that this is ultimately the foundation to any strong therapeutic environment. Ultimately if the client does not feel safe within his/her environment, then progress cannot be made.

When reflecting upon my own theoretical orientation, I realize how closely this aligns with Stanley Greenspan’s DIR/Floortime model. Because this model is based on the formation of relationships, it follows many of the same principles that I focus on as a humanistic, client-centered therapist. When working with children diagnosed with ASD, I find that meeting them
within their own musical space and building the relationship within this space is the most effective form of treatment. I have been fortunate enough to have the opportunity to work in a facility that utilizes Greenspan’s model and have witnessed special education teachers using this model with the same students that I work with as a music therapist. I found that the way in which I approached my work with my clients was very similar to the way in which the “Greenspan” teachers approach their work with their students on a daily basis. I became interested in the teachers’ perspectives of the influences of music therapy for their students and the carryover that music therapy has had from music therapy settings to non-music therapy settings within the classroom. I also became interested in the teachers’ perspectives regarding the similarities and differences between music therapy and Greenspan’s DIR/Floortime model.

The design of this study can be considered a qualitative comparative case study due to my attempt to analyze and compare the varying perspectives of multiple individuals through the use of interviews. According to Merriam (1998), a comparative case study is one that “involves collecting and analyzing data from several cases and can be distinguished from the single case study that may have subunits...embedded within” (p. 40). I aimed to explore each teacher’s perspective on the influences of music therapy treatment for their students and how it relates to the use of Greenspan’s DIR/Floortime model for working with children diagnosed with Autism Spectrum Disorder (ASD). In addition, each teacher’s responses within the interview were compared with that of responses given by the other teachers involved in the study.

Research Questions

Research questions were as follows:

1. How do these teachers describe the ways that individual music therapy has contributed to the education and development of their students in present and past school years?
2. What are the processes that each of the teachers use to determine if a child would benefit from music therapy services?

3. What do the teachers identify as the similarities and differences between Greenspan’s DIR/Floortime model and music therapy?
CHAPTER II

REVIEW OF LITERATURE

A review of the literature examines music therapy and its influences and effectiveness on areas of development including language/communication, social/behavioral, musical, cognitive, and psychomotor skills for children diagnosed with autism spectrum disorder (ASD) (Allgood, 2005; Edgerton, 1994; Howat, 1995; Kaplan & Steele, 2005; Kern & Aldridge, 2006). In addition, a review of the literature related to the use of Stanley Greenspan’s DIR/Floortime model and its effectiveness with and influences on children diagnosed with ASD is investigated (Coletti, 2012; DeWaay, 2012; Mohoney & Perales, 2003; Pajareya & Nopmaneijumruslers, 2011). Lastly, a review of the one existing study conducted by Carpente (2009) is discussed in which the effectiveness of the combination of music therapy treatment and Greenspan’s DIR/Floortime model are explored in the treatment of children diagnosed with ASD.

Music Therapy and Autism

In exploring the influences of music therapy treatment on the development of children with ASD, researchers have used a variety of measures to investigate this process. Researchers have explored these influences using methods including quantitative categorization and treatment, (Edgerton, 1994; Kaplan & Steele, 2005; Kern & Aldridge, 2006) case studies, (Howat, 1994), and parental perceptions of treatment (Allgood, 2005).

When attempting to categorize all target growth areas addressed by music therapy for individuals diagnosed with ASD, Kaplan and Steele (2005) conducted a study that aimed to analyze the music therapy goals and outcomes for their clients diagnosed with ASD within their organization. Due to the large number of clients enrolled in their organization each year, the researchers felt that developing a systematic analysis to document effectiveness of goals and
objectives for ASD clients would aid in quantifying the positive effects music therapy possesses for this population. The researchers developed a computerized program (The Music Therapy Outcomes-Based Measurement Program) designed specifically to organize the data. For each client previously diagnosed with ASD, music therapists working at this organization entered information pertaining to interventions used during the sessions, goal areas addressed, level of difficulty, session format, and skills attained during sessions. In addition, researchers asked parents and caregivers of the clients to complete a survey pertaining to their perspectives of the effectiveness of music therapy and its ability to generalize acquired skills in a non-music therapy environment. Over the two years of the program, researchers collected data on forty clients ranging in age from two to forty-nine years. Results indicated that the goal area addressed most often within music therapy sessions was language/communication (41%), followed by behavioral/psychosocial (39%), cognitive (8%), musical (7%), and perceptual/motor skills (5%). Researchers found that 100% of the clients reached their primary objectives within the first year of treatment, and that 77% of the clients also met their intermediate objectives during this time span. In addition, 100% of the parents and caregivers surveyed believed that music therapy treatment was an effective treatment modality, and that skills developed during sessions were frequently observed outside of sessions within a non-music therapy environment.

Edgerton (1994) aimed to explore the effectiveness of Nordoff-Robbins improvisational music therapy on the communicative abilities of children diagnosed with ASD. She hypothesized that through the use of improvisational music therapy, participants may display a significant increase in both their musical and non-musical communicative skills. The researcher recruited a total of eleven children diagnosed with ASD that were between the ages of six and nine years old. During the ten-week treatment period, the children participated in individual
music therapy sessions that were predominately improvisational in nature. The researcher made use of a reversal design in evaluating the effectiveness of treatment and measured each child’s communication skills using a researcher-created assessment: The Checklist for Communicative Responses/Acts Score Sheet (CRASS). Using the CRASS, the researcher measured both the musical and non-musical communicative responses of each child during each individual music therapy session. After the ten week treatment period, results indicated significant improvement in the children’s communicative skills in both musical and non-musical domains (p<.01). In addition, all of the children demonstrated a dramatic decrease in communicative functioning within the reversal session that implemented pre-written and familiar songs. These results seem to indicate improvisational music therapy is an effective intervention for children diagnosed with ASD. For many children diagnosed with autism, communication is a common area of deficit. Results seem to indicate that music therapy holds great potential to improve autistic children’s abilities to communicate with others both within and outside of a music therapy setting.

Similar to Edgarton, Howat (1995) was interested in exploring the influence of music therapy on the communication skills of children with ASD. Her case study aimed to examine and analyze the developmental process of a ten-year-old girl (Elizabeth) undergoing music therapy treatment over six years. Elizabeth was diagnosed with autism at the age of two and was referred for music therapy treatment at the Nordoff-Robbins Music Therapy Center at the age of ten. During the six year treatment period, Howat explored the ways Elizabeth connected with the therapist during music therapy sessions as well as how she evolved both musically and non-musically. Throughout the treatment period, Howat maintained detailed session notes after each session that included a rich narrative of all significant events that occurred throughout the sessions, as well as any observed changes in Elizabeth’s behaviors. Results indicated that
Elizabeth began to learn how to communicate with others, especially learning to express feelings of anxiety and anger, as a result of the improvised musical experiences. She began to use her voice during improvisation and eventually began singing in a more purposeful and centered manner, as opposed to the sporadic quality that was frequent during early sessions. During instrument playing, she began playing with purposeful beating patterns using alternating hands in an interactive manner with the therapist, and displaying an increase in psychomotor abilities and socialization with the therapist. Her social development during sessions evolved as she began to connect with the primary therapist and as they created a musical relationship based on a foundation of trust. Though this case study represents only one individual, the researcher uses detailed analysis of sessions conducted regularly over six years to provide deep insight into the possibilities of music therapy for children diagnosed with ASD. Not only did Elizabeth’s communication abilities improve, her socialization skills, musical skills, and psychomotor skills improved as well.

Because children with ASD typically struggle in their abilities to interact with others and commonly engage in solitary play rather than seek out the attention of others, Kern and Aldridge (2006) were interested in improving peer-interaction and socialization for children with ASD. They examined the influences of music therapy interventions provided during outdoor playtime on the behaviors of a group of four boys between the ages of three and five years old diagnosed with ASD. The purpose of the research was to evaluate the effects of musical stimuli presented within a playground setting on positive peer interactions during playtime with others. A secondary purpose was to investigate how an original song sung by teachers and peers influenced positive peer interactions. The participants for this study were enrolled in a community-based child care program. The researchers designed an outdoor music center called the “music hut”
that contained various musical instruments. They also created original songs for each of the four boys that was sung to them by the teachers during the playground time. The musical interventions (music hut and original song) were implemented using a multiple baseline design making use of four conditions: baseline, adaptation of “music hut,” original song sung by the teacher, original song sung with peers. The researchers measured responses using a time-sampling recording procedure. Results showed that the adaptation of the playground into the “music hut” did not display any positive effects on peer interactions. However, the introduction of the original song sung by the teachers and peers facilitated a significant increase in involvement and play with peers. The results of the study support previous findings made by Howat (1995) regarding positive influences of music therapy interventions on increasing the amount of social and interactive behaviors of children diagnosed with ASD.

When examining the potential positive influences of music therapy treatment for children diagnosed with ASD, researchers have found that it is important to receive feedback and input from the parents who typically are more aware of their child’s own unique qualities and characteristics compared to other people who may come in contact with the child. Allgood (2005) sought to explore the thoughts and opinions of parents whose families included a child diagnosed with ASD and were invited to participate in group family music therapy sessions with their children. The purpose of the study was to gain a rich understanding of the therapeutic process through the insights of the parents. The researcher recruited four families willing to participate in group family music therapy sessions with their children. Sessions took place once a week for 45 minutes over seven weeks. The researcher conducted both pre-session interviews with each family and post-session group interviews with the combined families. Results from the post-session group interview showed parents believed overall that the music therapy sessions
aided in promoting socialization and communication within their children as well as within their family unit. The parents also commented on the overall cohesion of the multifamily group and how it had transformed over the seven week period. The majority of the children began the first session with isolated and fearful dispositions; however, at the end of the seven weeks, many of the children were interacting with each other and with family members during the musical experiences. Many of the parents also commented that the music therapy sessions became part of their family bonding time and that they frequently used this time to connect and interact with their children in a safe and open environment. The results indicate that parents believe music therapy treatment can be used as a successful medium for promoting positive developmental growth.

Results of these studies reveal the positive potentials that music therapy treatment holds for children diagnosed with ASD. Though the studies varied in their methodologies and measurement techniques, all indicate music therapy treatment increased and fostered the developmental growth of children diagnosed with ASD in a variety of target areas including social/behavioral skills, language/communication skills, cognitive skills, musical skills, and psychomotor skills.

Stanley Greenspan’s DIR/Floortime Model

Researchers investigating Stanley Greenspan’s DIR/Floortime model have frequently explored its influences through the measurement of parents’ perceptions of the model’s effectiveness. The manner in which they explore this includes providing parent trainings using the model and/or relationship-focused interventions, (DeWaay, 2012; Mahoney & Perales, 2003; Pajareya & Nopmaneejumruslers, 2011) and interviewing the parents regarding their children’s school experience (Coletti, 2012).
In a study conducted by Mahoney and Perales (2003), researchers explored the effectiveness of the use of relationship-focused interventions on the socio-emotional growth of children diagnosed with ASD. Relationship-focused interventions offer continual encouragement and support for children in all settings. The interventions encourage caregivers to move with their children through their development and routine rather than move against them in a behavioral fashion. Researchers recruited twenty children diagnosed with ASD and their parents to participate in the study which spanned from eight to fourteen months. Within these months researchers provided weekly relationship-focused intervention sessions with the parents and children. Pre- and post-assessments were conducted on both the children and parents that measured socio-emotional qualities including affect, response, and sensitivity using measurement scales developed by the researcher entitled the *Maternal Behavior Rating Scale*, and the *Child Behavior Rating Scale*. Data was analyzed using a multivariate analysis of variance (MANOVA) to compare pre- and post-intervention changes. Results showed that parents and children displayed an increase in responsiveness, and as the parent’s level of responsiveness increased, the child’s level of responsiveness increased. The children demonstrated a substantial increase in interaction as well in overall socio-emotional levels during the treatment period. The results of this study indicate relationship-focused intervention plans for children with ASD can ultimately aid in increasing their socio-emotional growth and development.

To evaluate Greenspan’s DIR/Floortime model, Pajareya and Nopmaneejumruslers (2011) conducted a randomized pilot study to test the effectiveness of Greenspan’s model when implemented by parents and caregivers within home settings. Researchers recruited thirty-two children (between two and six years old) from a university in Thailand who had been previously
diagnosed with ASD. Children were assigned to either treatment or control groups that were then each separated by age and level of severity. Researchers provided extensive training in the DIR/Floortime model for the parents of children in the treatment group, and instructed them to utilize the techniques as much as possible with their child; the parents in the control group did not implement the model. Baseline measures and post-test measures of each child’s general cognitive abilities as well as functional emotional levels were evaluated using the Childhood Autism Rating Scale (CARS) (Schopler et al., 1986), The Functional Emotional Assessment Scale (FEAS) (Greenspan et al., 2001), and the Functional Emotional Developmental Questionnaire (FEDQ) (Greenspan & Greenspan, 2002). Results indicated that children of caregivers who implemented the DIR/Floortime model for at least fifteen hours a week displayed an increase in ability as measured by all three assessments. The children’s ability to interact with their caregivers, as well as their ability to communicate their wants and needs, showed vast improvement. These results support previous findings made by Mahoney and Perales (2003) in that the implementation of relationship based interventions seems to positively influence the growth and development of children diagnosed with ASD.

In studies conducted by DeWaay (2012) and Coletti (2012), both researchers sought to explore parents’ perceptions of the effectiveness of using the DIR/Floortime model for their children diagnosed with ASD. Similar to Pajareya and Nopmaneejumruslers (2011), DeWaay (2012) aimed to explore the effectiveness of the DIR/Floortime model through the implementation of an in-home treatment plan. The researcher recruited ten children and adolescents with autism and their families to participate in the study. Before beginning the study, the researcher conducted baseline testing using the same measures as Pajareya and Nopmaneejumruslers (2011). Parents and caregivers of all the participants were trained in the
DIR/Floortime model by the researcher and were encouraged to implement these strategies as much as possible within the home. In addition, DeWaay was interested in the perceptions of the parents during the study, and requested they make note of any significant changes they witness within their child. After parents implemented the Greenspan model for their children for one year, researchers administered follow up measures. Results indicated that the majority of parents believe the DIR/Floortime model was an effective treatment for their child. Most parents indicated a high level of satisfaction and many ranked the model as the most effective treatment their child had ever received. In addition, follow up measures showed most children displayed significant improvement on all measures when compared to pre-test baseline scores.

Coletti (2012) also examined the perceptions of parents whose children were enrolled in a preschool program that implemented the DIR/Floortime model and who were actively implementing the model at home. The researcher interviewed eight parents about their experiences with the DIR/Floortime model and the influences that it has had on their child. The researcher employed interpretive phenomenological analysis for the study through semi-structured interviews with each parent. After conducting the interviews, the researcher found common themes among the parents’ responses including how they discovered the DIR/Floortime model, the early use of the model and how they were able to cope, the effects of the model on the parents themselves, how well the model fit for their child, and the support needs of the parents themselves. Findings indicated the parents largely believed the model had influenced their lives in a positive way. When they used the DIR/Floortime model, they found their own emotional state was very influential upon their child’s emotional state, and that by working together through the model, they were able to connect and grow together. When they first used the model, many parents reported having difficulty remaining patient, however as time progressed,
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the treatment began to evolve and many were able to develop an emotional connection with their child. Results from this study pertaining to positive influences and effects of the model remain consistent with findings from previous studies (DeWaay, 2012; Pajareya & Nopmaneejumruslers, 2011; Mahoney & Perales, 2003).

Music Therapy and Stanley Greenspan’s DIR/Floortime Model

There is presently only one completed study that explores the effectiveness of the combination of music therapy treatment and Stanley Greenspan’s DIR/Floortime model. Carpente (2009) aimed to investigate the effectiveness of Nordoff-Robbins Music Therapy (NRMT) treatment implemented within the framework of Greenspan’s DIR/Floortime model. The chief purposes of the study were twofold: discover if NRMT was effective in achieving individualized goals established for each child participant, and investigate if achieved musical goals paralleled non-musical goals that were established using the DIR/Floortime model. For the study, Carpente recruited four children who were diagnosed with ASD, were newly enrolled in The Rebecca Center of New York City, and had no prior music therapy experience. The researcher chose to use a mixed method approach in which he administered both qualitative and quantitative measurements. For the qualitative measures, a single-case design was used to collect the most data for each child that reflected their own individual processes and experiences. The quantitative measurements were pre and post-tests using the Functional-Emotional Assessment Scale (FEAS) (Greenspan et al., 2001) to address the DIR/Floortime non-musical goals, and the Goal Attainment Scale (GAS) (Kiresuk et. al., 1994) to evaluate musical goals established by the researcher. The participants completed twenty-six NRMT sessions over the course of the study, each session ranging from five to thirty minutes. Results showed musical goals, established using the GAS, contributed strongly to an increase in skills established on the
FEAS. More specifically, the improvisational flexibility offered within music therapy sessions as well as the unique musicality of each child appeared to facilitate growth in the developmental areas of self-regulation, engagement, and two-way purposeful communication. In addition to the increase in FEAS levels, post-test results on the GAS showed improvement in the areas of initiating interactions and relationships using musical play, as well as establishing two-way communication through the use of music. The increase in skills found on the Functional-Emotional Assessment Scale display a strong relationship with the increase in skills found on the Goal Attainment Scale, indicating a positive connection between DIR/Floortime model and music therapy.

Implications

These studies seem to indicate a gap in the literature pertaining to the integration of music therapy with Stanley Greenspan’s DIR/Floortime model in the treatment of children with ASD. Many researchers have examined the influences of music therapy in the treatment of children with autism. These researchers have shown that music therapy has the potential to address and improve areas of deficit for children with ASD including social/behavioral skills, (Allgood, 2005; Carpente, 2009; Kaplan & Steele, 2005; Kern & Aldridge, 2006) language/communication skills, (Allgood, 2005; Carpente, 2009; Edgerton, 1994; Howat, 1995; Kaplan & Steele, 2005) cognitive skills, (Howat, 1995; Kaplan & Steele, 2005) musical skills, (Howat, 1995; Kaplan & Steele, 2005) and psychomotor skills (Howat, 1995; Kaplan & Steele, 2005). In comparison, few researchers have explored the effectiveness of Stanley Greenspan’s DIR/Floortime model; however a number of qualitative studies have been conducted indicating parents’ belief that DIR/Floortime treatment is effective for their children with ASD (DeWaay, 2012; Coletti, 2012). Other researchers found positive influences of relationship-focused
treatment (Mahoney & Perales, 2003), as well as positive influence of in-home DIR/Floortime treatment implemented by parents (Pajareya & Nopmaneejumruslers, 2011). Only one researcher has explored the effectiveness of the combination of music therapy treatment and the DIR/Floortime model for children diagnosed with ASD (Carpente, 2009). These combined studies seem to indicate there are similarities between the two modalities, that the two are complementary and can be used together to address both musical and non-musical goals through the formulation of relationships and communication.
CHAPTER III

METHODOLOGY

This study took place over a four-month period at the agency where I am currently employed as a music therapist. I utilized purposeful case sampling in order to obtain the most information regarding the subject matter. Recruited participants were considered to be rich in knowledge and information pertaining to the current study’s subject matter. This was determined based on the participants’ educational and professional background, as well as their exposure to music therapy treatment for their students in past and present school years. All of the recruited teachers implement the DIR/Floortime model within their current classrooms and witness music therapy treatment for many of their students diagnosed with ASD. The participants encompassed “a sample from which the most can be learned” (Merriam, 1998, p. 62).

Study Participants

Alice. As an undergraduate student, Alice attended a four-year university located in Western New York and earned her bachelor’s degree in childhood education. She then earned her master’s degree in special education. After graduating, she taught Universal Pre-Kindergarten (UPK) for approximately a year-and-a-half at a school in Western New York. She then relocated to the western United States and began teaching in a third grade inclusive special education classroom. She eventually relocated back to the Western New York area and was employed as a long-term substitute within a high school self-contained classroom. She held this position for approximately eight months before beginning her current teaching position, where she has been employed for approximately three-and-a-half years and is identified as the “Greenspan” kindergarten teacher. She is presently the only teacher working within a classroom
of school-aged children at the agency. She has held this position since her initial employment. Her formal training in Greenspan’s DIR/Floortime model involves a fifteen-hour online course offered by the current agency of employment. In addition, she completed an online workshop addressing ‘child meltdowns within the classroom.’ I presently implement individual music therapy treatment with two students in Alice’s classroom. One student receives individual treatment one time a week for thirty minutes, while the other student receives individual treatment two times a week for thirty minutes. As a class, all of Alice’s students receive group music therapy treatment two times a week for thirty minutes with another music therapist employed at the agency. Within the preceding school year, I closely interacted with Alice and her class and implemented group music therapy in her classroom. Alice has witnessed several of her students receive both individual and group music therapy treatment throughout her time employed at the agency.

Kate. Kate began her college career at a community college located in Central New York where she obtained an associate’s degree in communications. She then earned her bachelor’s degree in both English and Art at a local university. She immediately continued her education earning a master’s degree in both special and general education. While pursuing her master’s degree, she worked as a long-term substitute teacher at three separate schools for approximately four to five years. Within these long-term substitute positions, Kate worked predominately with children with special needs at the elementary grade level. After completing her master’s degree she was hired at her current place of employment as a “Greenspan” preschool teacher and has held this position for approximately four years. Kate’s formal training in Greenspan’s DIR/Floortime model involves a fifteen-hour online course offered by the current agency of employment. She has also attended and participated in several in-services pertaining to the
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Greenspan method and children diagnosed with ASD. In addition to this, she received training and guidance from the agency’s Greenspan mentor in her classroom one time a week for approximately one and a half years. I currently conduct group music therapy sessions with Kate’s classroom two times a week for thirty minutes. There is currently one student in her classroom who is receiving individual music therapy treatment one time a week for thirty minutes with another music therapist employed at the agency. Within the preceding school year, I conducted individual music therapy sessions with two of her students as well as group music therapy sessions with her class. Kate has witnessed several of her students receive both individual and group music therapy treatment throughout her time employed at the agency.

Judy. Judy graduated with a bachelor’s degree in special education from a college in Western New York and is currently pursuing her master’s degree in early childhood special education. For her master’s thesis, Judy is exploring and researching music therapy as a treatment modality for children diagnosed with ASD and is scheduled to graduate within the next year. She first began working with children diagnosed with ASD while in high school through volunteer work at a specialized Saturday morning program. She has continued to work with this population consistently throughout her college years. Judy was hired as a “Greenspan” preschool teacher at her current place of employment at the beginning of the current school year (approximately three months prior to the interview). Before beginning her current job, she was hired as a substitute teacher within the same agency and worked in this position for approximately six months. This is her first job as a special education teacher. Judy has no formal training in the Greenspan model. However, she has read many books and research articles on the topic. She also worked with a child diagnosed with ASD whose parents were implementing the Greenspan model in their home. There are currently two students in Judy’s classroom who are
receiving individual music therapy services one time a week for thirty minutes with another music therapist employed at the agency. In addition, Judy’s classroom receives group music therapy treatment twice a week for thirty minute sessions with the same music therapist. During the previous school year, I conducted group music therapy sessions for the classroom where Judy was the frequent substitute teacher. Due to Judy’s master’s thesis topic pertaining to music therapy treatment, she has frequently consulted with me regarding music therapy topics and information. We speak regularly and continually consult each other regarding interdisciplinary topics.

Jill. Jill earned both her bachelor’s and master’s degrees in special education at a university located in Western New York. While in graduate school, Jill was hired at her current place of employment as a classroom teacher’s aide for a designated “Greenspan” classroom and worked in this position for two years. During this time, she was hired as a long-term substitute teacher within this same classroom for approximately four to five months. She was recently hired as a “Greenspan” preschool teacher at the beginning of the current school year (approximately three months prior to the interview). Jill’s formal training in Greenspan’s DIR/Floortime model involves a fifteen-hour online course offered by the current agency of employment. I presently conduct group music therapy sessions with Jill’s classroom two times a week for thirty minutes. Though there are no students in her classroom that are currently receiving individual music therapy treatment, Jill recently recommended three of her students for treatment. These students are in the process of being evaluated and/or approved for services. Previous to this school year, Jill worked as a classroom aid in Kate’s classroom as well as a long-term substitute teacher during Kate’s maternity leave. Because of this, I worked closely with her and provided
consultation regarding the students that I treated within the classroom. This professional relationship has extended into the present school year and consultation remains frequent.

Data Collection/Analysis

I extended a personal invitation to the four individuals employed as pre-school and kindergarten special education teachers within the designated “Greenspan” classrooms within my own current agency of employment located in Western New York. I am currently employed as a music therapist at this agency and work closely with these teachers and their students daily. The teachers were requested to partake in a semi-structured, one-to-one interview. Prior to agreeing to participate in this interview, the teachers were given a consent form that informed them of my study’s subject matter as well as information regarding my purpose statement and research questions. All four teachers consented to participate in the study (see Appendix C). It was assured that their confidentiality would be protected and that pseudonyms were to be used for all transcriptions and analysis.

Each interview was “guided by a list of questions or issues to be explored,” (Merriam, 1998, p.74) and lasted 30 to 60 minutes. All of my questions during the interviews focused on the teacher’s perspectives on music therapy and how it corresponds with the DIR/Floortime model for working with children diagnosed with ASD (See Appendix D). All interviews were audio recorded and transcribed after the interviews were completed. These interview transcriptions served as the raw data for this study. The transcribed interviews were analyzed for commonalities including key words and themes that were central to the research questions that I initially proposed.

Chronology

The following chart presents the timeline of the study from its inception to its completion.
Original study proposal was submitted to thesis advisor.

Thesis advisor approved study proposal.

Study proposal was submitted to the Human Subjects Review Board.

Human Subjects Review Board approved study.

Teacher participants and agency administrator were informed of the study.

Consent forms were collected from all the participants and agency administrator.

Individual interviews were conducted with Jill, Judy, and Kate.

Individual interview was conducted with Alice.

Interviews were transcribed verbatim.

Interviews were analyzed for common themes and keywords. A meeting with the thesis advisor also occurred.

Email attachments of individual interview transcriptions were sent to the teachers for member checking purposes. All teachers
confirmed information from the interviews.

Trustworthiness

In order to ensure the credibility of the interviews, I made use of member checking for this study. After completing the transcriptions of the audio recorded interviews, I emailed each teacher individually with the transcription of their own interview. The teachers were requested to review the transcription and confirm that the information was correct. They were also requested to make any changes that they felt were necessary and/or expand on any thoughts that they addressed during the interview. “This sharing of findings initiates a process in which researcher and participant can explore areas of agreement and disagreement” (Aigen, 1995, p. 306). All of the teachers responded to the email with a confirmation of the information within the interviews. None of the teachers added any additional information. It is acknowledged that due to the close professional relationship between myself and the teachers, the teachers may have felt uncomfortable making any negative statements during the one-on-one interview regarding music therapy treatment or the profession as a whole. However, they were encouraged to give their honest thoughts and opinions for all interview questions and were directed to outside sources should they need to clarify any responses that they may have felt to be uncomfortable.

Prolonged Engagement

As a music therapist who works at the current agency where the study took place, I feel that I have a strong foundation for the agency’s values and the manner in which its employees implement services and treatment. I have been employed at this agency for approximately one and a half years and have grown immensely as both a person and as a professional. As this current position is my first full-time job as a board-certified music therapist, when first entering
the position I felt relatively limited in my experience and knowledge in working with children diagnosed with ASD. As I began working, I found myself learning and collaborating with many of the professionals around me including special education teachers, speech therapists, physical therapists, and occupational therapists. Many of these teachers and therapists had many years of experience working with children diagnosed with ASD and were willing to share their knowledge and advice with me and their other fellow employees. I feel that this constant interdisciplinary collaboration is a key strength of the agency and that it largely holds up to their mission statement of “improving the quality of life for adults, children and infants with communication disorders by delivering cutting edge diagnosis and treatment of hearing and speech impairments and related special education services.” The services that I provide and observe in the agency also closely correlate with its core values of “embracing diversity, respecting and empowering each individual as a whole person, perpetuating a reputation of integrity, building and preserving positive relationships, demonstrating compassion, and fostering teamwork.” These values strongly relate to the basis for Greenspan’s DIR/Floortime model as well as the manner in which I provide music therapy services as a humanistic, client-centered music therapist. I have found that the majority of the professionals employed at this agency have an open and inviting demeanor and freely welcome interdisciplinary ideas and discussion. As a professional that works within this agency, I felt that my experiences and strong professional relationships with each of the teachers involved in the study would ultimately aid in providing rich data and information regarding music therapy treatment as well as the DIR/Floortime model. I believe that this interdisciplinary discussion would also optimally spur more ideas and theories regarding treatment and differing methods of services.
CHAPTER IV:
FINDINGS

This chapter presents my findings and reflections of the interviews conducted with the four selected “Greenspan” special education teachers. It is organized into four sections. The first section describes the teachers’ responses regarding the strengths and weaknesses of Greenspan’s DIR/Floortime model implemented within the classroom. The second section describes the teachers’ responses pertaining to the influences of group and individual music therapy treatment for students in past and present school years. The third section describes the teachers’ responses regarding their own individual processes for determining recommendation of a child for individual music therapy treatment. The fourth section describes the teachers’ responses pertaining to their perceptions of the similarities and differences between Greenspan’s DIR/Floortime model and music therapy treatment. It also describes their perceptions regarding the influences of combining the two modalities. Common themes and keywords between the participant’s responses are addressed throughout this chapter.

Strengths and Weaknesses of the Greenspan DIR/Floortime Model

When speaking about Greenspan’s DIR/Floortime model, many of the teachers possessed similar attitudes regarding both the strengths and weaknesses of the model for the students within their own classrooms. The key phrases and themes that were identified within this portion of the interview were “following the child’s lead”, “highly motivating,” and “adapting.” The teachers identified these as important strengths of the model that they have found to be effective within their work.

Judy: A big strength is following the child’s lead. You can discover so much more when a child is motivated, and the only way to see what they’re motivated from is to let them explore. If we have a bunch of toys on the floor and one of my students goes toward the cow instead of the horse, I know I’m not going to try to talk about the horse, I’m going to
go with what they’re interested in and it makes learning and teaching so much easier because it’s what they choose and what they want to learn about...It’s a fun time for us as well because we get to use our imagination as well as them using their imagination.

Kate: It’s definitely a good motivator for kids, I mean you’re taking an area that the child really likes and then you’re growing off of that and motivating them to achieve a goal that you need them to, like something they’re interested in so it will keep their interest in what you’re doing and what you’re trying to achieve. A lot of times especially with my kids, the goals that I’m doing are often very hard for them and they get frustrated. It’s a lot of motor planning and it’s literally overwhelming for their whole body so if you’re picking an activity that they like, they’re going to be a little bit more willing to try to follow your lead and be a little more willing to do what you’re asking them.

Alice: I like that it has the ability to adapt to where a student is no matter what, and no matter level that they come into your room with, you know that there is something that you can do with them. And I love just having that philosophy...and it’s not so structured and it’s not making them come over and do a farm activity. You know, this is just as important and it’s catching them where they need to be and building from there.

Jill: ...basically allowing the children to play, because you see a lot when they’re playing. They have this image going on in their minds that they may not be able to portray to us, or speak, or communicate with us so you can go over there to try to get in their brains and see what they’re doing... it’s nice to be able to get down to their level, and do what they want to do. It’s not a huge structure based philosophy, which is nice because you’ll see those kids who will turn when there is any sort of structure. They become frustrated, angry, they just shut down. This way, you’re allowing them to be a kid, but you’re still trying to push them a little bit to get them to that next level... they don’t realize that they’re really doing a structured activity because they’re playing.

The teachers expressed similar thoughts regarding how Greenspan’s model can be used for children who experience difficulty with communication and socialization. In my work I have found that it is often the case that children diagnosed with ASD are unable to attend to structured “table top” activities within a school setting for any extended period of time. They often become frustrated when structured activities are presented to them and “shut down” as a result. This has the potential to inhibit their learning process. As the teachers all addressed within their responses, the Greenspan method allows teachers and therapists to move with their students and find the child’s preferences and strengths. These preferences can be made into “teachable moments.”
Judy: We do most of our teaching and working on their goals during Floortime. That’s when I hit most of my goals with my kids, with colors, and shapes, and sorting. They don’t know that they are learning. They just think that they are playing. If they are doing something they like, they are not going to want to move on, they won’t get bored… Floortime is great because it is a teachable moment at all times.

Moving with the students as they develop and grow may allow them to learn in a more nurturing and accepting environment. Optimally the children will not associate learning with stress and anxiety, but with excitement and eagerness.

When addressing the weaknesses of the model, the teachers provided differing responses. As the only Kindergarten teacher at the agency, Alice’s view of the weaknesses of the model appeared to be slightly more pronounced than the others.

Alice: I think that it doesn’t push the children sometimes as much as they need to be pushed. I don’t think that it’s a philosophy that works for every child. I think that when they come into a program it’s more universal, but as the child grows and progresses, it may not be the right philosophy for them, I don’t think that it’s going to work well if you want them to go onto a regular public school… I’m conflicted to see it work all the way up through the grades, even when you do get into state testing. I don’t see how Floortime is going to help you prepare as much for the state testing, I’m not saying that it’s impossible but I do find it harder to see that connection.

Alice discussed how she has the added duty of preparing the children for district schooling that does not offer the Greenspan method, and therefore must focus more on academic concepts.

Essentially, she is required to use the Greenspan method, but also incorporate structure within the school day.

Alice: I am kind of caught in the middle going “but next year if they end up in district, they’re not going to have Greenspan and they are going to be sitting at a desk, you know, they are going to have a much more structured day.” So I really kind of play the fence in going – “I know you really need the sensory opportunities and I want to make sure they’re in there, but I also want you to know that sometimes you have to sit even when you don’t really want to.”

The preschool teachers had slightly different comments regarding the weaknesses of the model. Judy described how she does not feel that the model is “for every child.” She also discussed the
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contrasting philosophy of the Applied Behavior Analysis (ABA) model in relation to the Greenspan model:

Judy: I think that it doesn’t work for all children. I am partial to it, but I think ABA works for the children that are more behavioral. With ABA you’re helping a child learn behaviors that are acceptable. Floortime is more for social/emotional. Our kids have to learn that aspect. An important part of learning in any atmosphere is learning to self regulate, and associate with peers and adults. For the children with more severe behaviors, this probably wouldn’t be the program for them because they have other things to focus on before they can focus on socializing and interacting with others. They need to learn about themselves first.

Kate described how, similar to the music therapy field, processes and results of the Greenspan model can be difficult to quantify and test:

Kate: Sometimes in areas like testing skills, a lot of times in Greenspan we’re asked to really follow the child’s lead, and then when the assessment of the child comes it can be hard to really get a good assessment because it may be something that the child does not show interest in, but we still need to comment on it, we still need to assess where they are with it...It makes it hard to talk about it and document it.

I found myself agreeing with Kate regarding this response and have experienced this similar problem within my own work as a music therapist. Occasions in which administrators have requested me to quantify progress of goals and objectives into a categorical table can frequently be a source of stress and difficulty. Because music therapy treatment is often fluid and improvisational, it is difficult to quantify results into a numerical format that is consistent from one session to the next. This causes numeric testing in the field to be difficult to accurately measure.

In contrast with these responses, Jill did not identify any weaknesses of the model and reported that she enjoyed using this philosophy with her students. After reviewing the responses, it became evident that the teachers greatly varied in their viewpoints of the weaknesses of the model. I concluded that this may be due to the amount of experience that each of the teacher’s
possess; as it seems that the teachers with more teaching experience were able to identify more succinct weaknesses as compared with the teachers with less teaching experience.

Influences of Individual and Group Music Therapy Treatment for Students

When analyzing this portion of the interviews, the key words and themes that consistently emerged regarding the influences and characteristics of music therapy treatment were “calming”, “motivating”, and “focusing.” These words and ideas appeared often within the teachers’ explanations pertaining to the qualities of music therapy treatment that allow their students to grow and develop. All of the teachers expressed the various impacts that both group and individual music therapy treatment has had for their students in past and present school years within a multitude of developmental areas. These areas include cognitive skills, psychomotor skills, speech and language skills, participation, eye-contact, and social skills. Judy spoke of how music therapy has aided in her students’ cognitive skills:

Judy: ... it’s enticing to sing a song and count without even realizing that you are doing something that is stressing your brain. Even one of our students with her behaviors and her lack of being able to express herself, with music, she gets it. She can count, and she can point to objects, and she can attend and learn the letters and so I see a lot of recognizing things and remembering them and it takes a lot for our kids to remember them. You need repetitiveness and refocusing and when there are songs that they can attach things to, it is so much easier... I definitely see a lot of cognitive abilities being shown in music therapy.

Kate reflected on how music therapy has aided her students in their abilities to focus and attend to task, as well as perform psychomotor skills. She also discussed how many of her students display an increase in specific skills during music therapy (most notably physical therapy and speech skills) that the children rarely display within the classroom setting:

Kate: Almost all of the kids in my classrooms in the past five years have always been able to focus and participate in music therapy within the classroom setting, which they may struggle at a circle within our classroom. I’ve definitely seen children within a music therapy classroom show me skills that they cannot show me within the classroom unless it is highly musically based. I have kids right now in my classroom that will participate,
that will vocalize, that will do physical therapy skills that are really hard for them, you
know lifting their legs and stomping their feet. Their physical therapist can’t really get
them to do it, like walk up the stairs because they are just so low tone, but yet motivated
by the music they’re able to actually try to lift their feet, or at least they’re tapping their
foot or working even slightly on those motor skills. Vocalizations are really big, although
they may not be vocalizing on demand, they’re usually vocalizing in rhythm with the
music or vocalizing when we’re singing which they aren’t always successful with in the
classroom.

Alice described how her students show a large increase in participation and engagement when
music is presented to them within a music therapy session:

Alice: My kids in general “wake up” to music. They are just so alive and engaged, we see
much more eye-contact, we see participation, and happier participation…it’s not like “Oh
yeah, I’ll just go through the motions” it’s “Oh, I actually want to, I’m aware, I’m
engaged, I’m a part of this, and I’ll do the motions!” We see abilities to follow directions
a lot more.

Alice also described how her students appear to calm during music therapy sessions:

Alice: There’s definitely a calmness. They’re more comfortable in their environment and
more comfortable around their peers, more comfortable with our routine. They seem to
have less agitation, more awareness, more ability to calm themselves. They seem to come
in kind of “wired”, and with music they seem to relax into themselves.

Similar to Alice, Jill also expressed how her students display a large increase in participation
during music therapy sessions. In addition, she expressed how her students display an increase in
eye-contact and positive affect, as well as an increase in their ability to vocalize. Jill also
discussed the “carry-over” of skills that occurs from music therapy sessions into the classroom
setting.

Jill: Eye contact has been huge. Vocalizing; trying to hum and sing along the songs.
There are kids who are now trying to count when we do the “Leaf Counting” song, trying
to point their finger as they count along with us. I see them doing that randomly in the
classroom. When we’re doing something else, they’ll be at our leaves trying to count, and
basically they’ll be having their own music session that they’re carrying over upstairs that
they are doing on their own...As the year goes on, you see more and more just how
happy they are when music is playing... you can really see when a child needs it. They’re
vocalizing, singing, humming, eye contact. It’s huge with this, just being more aware of
everything around them.
As I was listening to these responses within the interviews, I realized the importance of interdisciplinary discussion concerning current students in treatment. I have found that due to a hectic schedule that often requires me to travel to various sites throughout the community, I do not often have the chance to observe the children within their classrooms during a typical school day. Because of this, I am not given a clear perception of how the children function within a “non-music” setting and only have the chance to interact with the children within group and/or individual music therapy sessions. This often causes difficulty in measuring baseline and/or normative functioning skills. Many of the teachers reported that their students display an enhanced set of skills during music therapy sessions that are not as frequently observed within “non-music” classroom settings. From my perspective as the music therapist, these enhanced skills may not seem as ground breaking due to my lack of exposure to the child’s normative state within the classroom. To combat this, I have discovered that one of the key components of gauging progress within a child’s treatment is to discuss their actions and behaviors with their teachers. The teachers are given the opportunity to observe their students within all settings and have a more accurate measurement of their baseline functioning levels. Knowing this, I hold much value in the perceptions of the teachers regarding the influences of music therapy treatment and the effectiveness that it has for their students. Jill’s comments regarding the “carry-over” of skills from group music therapy into the classroom is extremely important to me as a music therapist. It tells me that the children are ultimately absorbing and utilizing the information that they receive during sessions - a key goal for any form of therapy.

As was made evident by the responses, the teachers see value in music therapy treatment for their students and can identify the developmental areas that they feel music therapy has had a positive impact on. It should be noted that all of the teachers at some time within the interview
described music therapy sessions as "calming", "motivating", and "focusing" for their students. In agreement with the teachers, I believe that these three characteristics of music therapy treatment aid in creating the nurturing environment that promotes growth and development for children with ASD.

Processes for Recommending Students for Individual Music Therapy Treatment

In describing the processes that many of the teachers use for recommending their students for individual music therapy treatment, many of them described similar qualities that they witness within their students that they feel are appropriate for treatment. Common themes that emerged were: "increased focus to task", "increased motivation", "increased eye-contact", and "increased positive affect" when presented with music. All of these characteristics were mentioned as key components that appear within students that they refer for individual music therapy. According to the teachers, many of these students display skills within music settings that are not observed in non-music settings. When asked questions pertaining to music therapy referral, Judy described a specific student that she was planning on recommended for individual music therapy services:

Judy: ... When he first started coming, his first few days, we talked to him and then we realized if we just sing it like we do all the other children, he responds so much differently. So he’s definitely a candidate, he makes eye contact, he sits in his seat, he wants to participate, and that’s something we have a hard time with in any other setting that isn’t music or doesn’t have songs is participating and not getting antsy and wanting to scream or bite or scratch...It’s crazy how different he is in this setting compared to our classroom.

Kate also described how many of the students that she recommends show an increase in attention when music is played. She reflected on how she commonly uses music within her classroom to gauge responses in her children as well as to elicit a calming environment:

Kate: ...just even turning on the music and seeing if it gets their attention...A lot of times I could be singing a song myself and it will grab their attention. A lot of times I’ll use
singing to calm kids and kind of regulate them again. So different things I’ll do in my classroom and see how they respond to it before I suggest individual music therapy for them. The ones who will usually benefit from music therapy, they stand out, they respond instantly to it. One of my kids now, when he first came to my room we barely saw anything with him within the classroom, and then when we started our first group music therapy class he was like a totally different kid. You know, where if I put on the music all of the sudden I could have his attention and it was pretty instant and I was like “whoa, he is drawn to the music!”

Jill made similar comments regarding her students’ increase in attention when music is played within her classroom:

Jill: You can tell when you see the kids who, the first time you turn on music, their heads kind of turns towards it. Especially with our population, they don’t really acknowledge what’s going on, they don’t know what’s around them, their surroundings. So the kid will kind of turn to see where the music is coming from. He’ll go over and look up at the CD player. The kids, the first time you sit down for circle, who will sit for five, ten minutes. They might not necessarily be looking at you, but they will be waiting to see what will happen next.

Alice mentioned similar qualities and characteristics of the students that she recommends; however, she also touched on the fact that many of her recommended students in the past have been more “withdrawn” within classroom settings, but were able to open themselves when music was presented:

Alice: I almost feel like it’s the kids that are more withdrawn in the classroom, the kids that are more reserved around other children, keep to themselves, it’s really hard to break into their world. And I think those are the kids that we see the most dramatic change when they’re involved in music. Suddenly it doesn’t matter whose sitting next to them, it doesn’t matter if you’re right in their face because they want to be a part of it. I mean that’s not always the case, but those are the ones that come to my mind.

Perhaps Alice’s slight variation in perspective is another indication of the differences between teaching preschool special education students as opposed to school-aged special education students. Though Alice mentioned many of the same qualities and characteristics stated by the preschool teachers, she also expanded on these thoughts and made note of personality traits that she has observed in her students in past and present years. Perhaps at the school-aged level,
students begin to display more developed personality traits that may not be as apparent at the preschool level. Alice’s perspectives may also be due to the fact that she has had more experience in teaching special education as well as her three to four years of exposure to music therapy treatment over the course of her employment at the agency.

The teachers’ responses display their ability to distinguish significant positive changes in many of their students when music is presented to them. Based on their common responses regarding student characteristics including increased focus to task, increased motivation, increased eye-contact, and increased positive affect when presented with music, the teachers are able to use these signals as a strong indication for potential success in individual music therapy treatment. Their acute perceptions of their student’s responses to music are frequently used to promote and encourage music therapy services to supervisors and administrators. As a music therapist, I also monitor for these similar qualities and characteristics of the students in group music therapy sessions. Children who show exceptional interest in musical stimuli and increased focus to task during group music experiences often prove to be strong candidates for individual music therapy treatment. As was mentioned previously, I have found that consulting with the teachers regarding a child’s abilities and behaviors in the classroom offers me invaluable insight and perspective as well as a more holistic profile of the child.

Similarities and Differences Between Greenspan’s DIR/Floortime Model and Music Therapy Treatment

When discussing the similarities between Greenspan’s DIR/Floortime Model and music therapy treatment, the teachers again had many similar responses. The key words and themes that emerged were: “following the child’s lead”, “motivation”, and “exploration.” In discussing these similarities, Judy reflected on the belief that the way in which goals and objectives are achieved
during both Floortime and music therapy is very fluid, and can change from day to day. She also discussed the belief of "following the child's lead" as a strong similarity between the two methods.

Judy: Definitely going with the child’s need; what motivates them. What do you want to sing about? What do you want to use? For example, I read the evaluation report about my student that gravitated towards the guitar, so the therapist started playing the guitar. That is exactly what Floortime is. A kid is going towards a toy so we are going to start playing with that toy. Because it’s about the child, it’s not about the teacher. It’s about what we can do to help the child learn. The only way we are going to do that is to go with what their interests are... We go with the flow and whatever happens happens. Whatever our teachable moments are, they’re there. I think that music therapy is like that, too. There is always a goal and an objective, but the way that you reach that is day to day or minute to minute.

Depending on the child’s interests and needs, it is the teacher’s responsibility to find the “teachable” moment and create an experience that can have positive developmental benefits for the child. This philosophy is similar to that of music therapy in that music therapists strive to meet their clients at their own developmental level and move with them wherever they need to go. Depending on what the client is interested in on a particular day, the same goal could be addressed using a variety of different instruments and musical exercises. The importance of exploration within this process is also a key component of the treatment. It also should be noted that within this passage Judy clearly expressed a humanistic, client-centered philosophy through her statement: “it’s about the child, it’s not about the teacher.” This statement closely aligns with my own philosophy of practice and brings to light the fact that the Greenspan method is very student centered.

Kate also described “motivation” as a key similarity between the two methods of treatment. In addition, Kate discussed the fact that both modalities aim to address goal areas that encompass the whole child, not just one single goal area.
Kate: From what I’ve known about music therapy, I mean I’ve only observed so much, but it really motivates the kids, it’s on their interest level. So kids are obviously selected for music therapy if they are motivated by music, where Greenspan we look for something that the child is motivated with and we work on their goals within that motivational activity which pairs right along with music therapy. And I think also in Greenspan, we’re trained to really work on physical therapy skills, speech skills, cognitive skills, all those other skills while doing Floortime and I feel like with music therapy you’re really working on those skills too. You’re really combining all the skills into one when you’re working. It’s really universal along with the DIR/Floortime philosophy, you can work on all sorts of different skills.

Kate’s perspective on this subject makes a strong connection between these two methods in that they are both holistic in nature and consider the entire child, not just specific aspects of the child. Within music therapy treatment, I frequently address a multitude of goal areas within one session including physical, emotional, social, cognitive, and language needs. The music serves as the bridge between these goal areas and is the chief tool used by the music therapist to make progress in these goal areas. The way in which the Greenspan method is administered is similar to this in that the teachers are commonly addressing multiple goal areas within the unstructured play and exploration with the child. In this case, the play component is the bridge that can connect all of these goal areas together and is the chief tool utilized by the teacher.

Jill addressed the fact that both music therapy treatment and the Greenspan method allow the children to explore and learn within a non-threatening environment.

Jill: Basically, what I’ve seen from what you’re doing is you don’t pressure them to do anything. You hand out the manipulatives, whether they choose to or not... you don’t force them. Which is the same thing in Greenspan... We let them explore their surrounding, explore their room, explore their toys. If they don’t do what we want them to do, we’ll move on to the next thing. You don’t stop what you’re doing if a kid isn’t following directions to shake the shaker on their knee or whatever. We don’t stop that in the classroom either.

The fact that the children are given the chance to explore their surroundings without added pressure or discomfort from caregivers is invaluable for a child’s learning process. Within music therapy treatment, I commonly allow my clients to explore various instruments and sound
sources and perform creatively within the created safe space. During this process, the clients are learning and developing in a motivating fashion that allows for self-expression and communication. The Greenspan model also follows this philosophy for growth and development and focuses on the element of “play” as its main source for learning. Similar to music, play is motivating for children and does not commonly elicit stress or pressure within a child. They are learning organically, causing the learning process to be enjoyable and rewarding.

In addition to the commonalities of “motivation” and “exploration”, Alice described how she feels that music therapy and the Greenspan model are strikingly similar and are frequently intertwined together within her school day:

Alice: I don’t think that the DIR would work without music, like when I lose my voice it’s pretty much the most horrible thing in the world. I’m not the music therapist, but we’re singing all day, so I can’t imagine making the Floortime model work without the music component. I mean, we are singing cues for transition in the room, we are singing down the hallway because it keeps everyone focused on what they’re doing and where we’re going. It takes away the surprise factor that can so often throw our kids off. It’s calming, it’s entertaining, it’s how I bring them all back after I’ve done an activity that’s pretty tough academic wise...I’ll have their attention again and we can move on to something else. I can’t imagine our program without music.

Alice described how she often uses similar songs and musical exercises that I had originally implemented during group music therapy sessions with her classroom. She found these exercises to be successful in “focusing” her students, as well as “calming” them after an especially strenuous academic lesson. Alice’s use of these techniques and exercises in her “Greenspan” classroom exhibits her awareness of strong connections and similarities between the two models. She also described a keen awareness of interdisciplinary collaboration that has been of value to her as a special education teacher. According to Alice, the Greenspan method goes “hand-in-hand” with music therapy treatment, so much so that she finds herself using music constantly
within her day when implementing the Floortime model. This statement gives strong evidence and support for the success of music therapy treatment within a Greenspan model program.

When discussing the differences between music therapy treatment and Greenspan’s DIR/Floortime model, most of the teachers experienced difficulty in determining any concrete variations. The fact that many of them experienced difficulty in answering this question could indicate that through their perspectives, music therapy and the Greenspan philosophy are closely related and intertwined.

Judy: ...I don’t see many differences. We use the techniques of music therapy in our classroom all day long. We do incorporate some more structured activities, but we include music during those structured activities, so I don’t think there are differences. Music therapy would help in any program, but especially Floortime.

Jill and Kate both provided similar responses to this question pertaining to the differences between the formats of group music therapy sessions verses individual music therapy sessions. Both made note of the fact that group music therapy sessions are more structured for the children, while individual music therapy sessions appear to be more improvisational in nature. Because of this, they discussed their perspective that group music therapy sessions display more differences when compared to the Greenspan model, while individual music therapy sessions show more similarities when compared to the Greenspan model.

Kate: Its different if I’m talking about an individual music therapy session and a group session... a music therapy group session is more based on the structure of the group, and it’s the same as if I were to do a circle time, but it’s not really Floortime focused because you’re worrying about a whole group. If a child gets up and moves away from the group you’re not going to get up and follow that one child, you’re still focusing on the group. So in areas of group music therapy it definitely has its differences from the Floortime philosophy.

Jill: Group music can be a little more structured at times. They are sitting in a chair or on the floor for thirty minutes, where Floortime, they are able to move from one activity to the other. In group music they’re sitting, they’re sometimes getting up and dancing, but for the most part they’re sitting. So I’d say that’s probably the biggest difference, which
is, group music therapy is a little more structured than the Floortime. I mean, we do structured activities, but that’s not considered our Floortime.

In discussing the differences between the two modalities, Alice reflected on her perception regarding the difference in “focus” within the treatments:

Alice: I think that the focus is definitely different, like I said, I use music as a tool, not so much as an end result, and I think that music therapy is focused more on the music. I think for music therapists it’s like “hey if I get academics in there, it’s only beneficial”, but what you really want is for them to really get into the music, and relax into the music. I feel that I use it more as a tool like “Did I get the colors out of them?” Yes I did, but I had to do it through music. And I feel like with music therapy it’s all about the music, and hey if you got the colors too that’s just a bonus.

Alice’s perception on this topic is interesting in that it addresses a philosophical debate that is common within the music therapy field that I frequently struggle with. This debate is: Is music therapy “music as therapy” or “music in therapy?” Depending upon the philosophical outlook of the therapist, he/she may feel that the music itself is the driving force of the therapeutic change within the client. However, another therapist may feel that the music is being used primarily as a tool to address non-musical goals.

It soon became evident from the interview responses that the teachers largely recognized a strong connection between the methodology and philosophies of music therapy treatment and Greenspan’s DIR/ Floortime model. The keywords and themes that were frequently addressed in discussing this were “following the child’s lead”, “motivation”, and “exploration.” These words appeared commonly among all of the teachers when comparing the two modalities. In exploring the differences, many of the teachers experienced difficulty in determining concrete variations. However, it was addressed that the structure of group music therapy sessions was largely different than the freedom that the Floortime model offers. It was also mentioned that the “focus” of music therapy can differ from that of the Floortime model.
EXAMINING THE POTENTIAL

CHAPTER V:

DISCUSSION AND CONCLUSION

The findings of this study indicate that the influences of music therapy for children diagnosed with Autism Spectrum Disorder (ASD) are largely positive and have the potential to spur growth and development. According to the interviewed special education teachers, the qualities of music therapy that aid their students to learn and grow include: “motivating”, “calming”, and “focusing.” All of the teachers commented on music’s ability to motivate their students to participate in exercises as well as focus and calm them during moments of deregulation and stress. It was made apparent through the interviews that all of the teachers view music therapy as an integral component of their preschool program and the agency, and feel that music therapy has the potential to elicit positive change for their students.

When determining if a student would benefit from individual music therapy treatment, the teachers described their processes for referring a student for individual treatment. The common themes that emerged were: “increased focus to task”, “increased motivation”, “increased eye-contact”, and “increased positive affect” when presented with music. The teachers described their recognition of these qualities within their students as well as a need for individual treatment for these particular students. This recognition of need further promotes the music therapy profession and aids in the growing awareness of music therapy treatment. As more children are referred for individual music therapy treatment, it is hopeful that interdisciplinary awareness will begin to grow and flourish. The data revealed that the teachers value music therapy treatment for their students and frequently promote it to parents, supervisors, and administrators.
The chief findings of this study allude to the fact that there seem to be strong similarities and connections between Stanley Greenspan’s DIR/Floortime model and music therapy treatment. Based on the perceptions of the special education teachers, the Floortime model and music therapy treatment both provide strong “motivation”, “exploration” and the philosophy of “following the child’s lead.” The teachers described music therapy’s ability to encourage growth and development by providing an environment that is safe for the child and free of pressure. Children are encouraged to express themselves freely and creatively without restriction or restraint. This philosophy largely corresponds with that of Greenspan’s DIR/Floortime model in that children are encouraged to freely play and explore. Their learning and development is gained through this unstructured play and exploration that is guided by the teachers and therapists. In addition, the DIR/Floortime model is designed to address a multitude of goal areas including cognitive, social, emotional, physical, and language development. Music therapy also has the potential to reach all of these goal areas through the use of musical interventions and experiences. A child is given the opportunity to address these goal areas through the use of music in an enjoyable and non-threatening manner, causing learning and growth to be a source of excitement rather than stress. Overall, the teachers identified and described a multitude of similarities between the two modalities and view them as two successful methods that are largely intertwined in their implementation within their current place of work.

Implications for Future Research

Unfortunately there is currently a paucity of research exploring the combination of Stanley Greenspan’s DIR/Floortime model and music therapy treatment. This appears to be due to a lack of interdisciplinary discussion and collaboration between music therapists and special education teachers/professionals. I feel that through this comparative case study, I was able to
EXAMINING THE POTENTIAL

gain a deeper level of insight pertaining to the influences of music therapy treatment and the potential effectiveness that it has for children diagnosed with ASD. These interviews also gave me deeper insight into each of the teachers’ own definition of what Greenspan’s DIR/Floortime model is as well as their perceptions of music therapy. Through this process, I was able to deepen my understanding of the DIR/Floortime model and found myself beginning to develop ideas regarding how to incorporate its philosophies and methodologies into my own practice as a music therapist. I find that I have developed into a more holistic professional and am willing to search outside of the music therapy field for additional ideas and influences for treatment. In return, I feel that the teachers were able to learn more about the field of music therapy and how they can effectively use music within their classrooms. As a result of the interviews, I believe that communication between myself and these specific teachers has vastly improved and that my professional relationship with each teacher has been further strengthened. This in turn has enhanced the holistic treatment for our common students and the consistency in the methods that we implement.

The process of this study has confirmed my belief that interdisciplinary discussion and communication is the key to success in any treatment model and that it should be encouraged within all settings. It is only through consultation with other disciplines that we can learn and grow as professionals and ultimately provide better treatment for clients and students. Through the process of conducting this study, I was able to gain a greater understanding and appreciation for the benefits and necessity of interdisciplinary collaboration. Since completing the interviews I find that I am more frequently consulting with teachers and therapists regarding the progress of clients, and through this process I am able to obtain a more holistic view of the children I treat. I realize that I must strive to seek out this information more often within my work in order to
provide the best possible treatment, and that open communication between disciplines is essential. Due to my interest in Greenspan's model as well as an opportunity for professional growth and development, I plan on completing the fifteen-hour online DIR/Floortime course that is offered through the agency that most of the interviewed teachers have completed. I feel that this training and experience will further enhance my understanding of Greenspan's model, as well as better aid me in incorporating its philosophies within my own work. It was made evident through this study that Stanley Greenspan's DIR/Floortime model and music therapy treatment have many commonalities and can complement and enhance each other when combined together within a treatment plan. It is only through this interdisciplinary correspondence and discussion that these associations can be made and further explored. Future sources linking these two methods may help future professionals to join these two modalities together within a holistic treatment plan for children diagnosed with ASD. Based on my own experiences as a music therapist as well as the thoughts and opinions of the interviewed special education teachers, it is evident that these two modalities offer nurturing support for ASD students receiving treatment, and when intertwined into an interdisciplinary treatment model can address the needs and development of the whole child.
References


APPENDICES
APPENDIX A:

Music Therapy for Children Diagnosed with Autism Spectrum Disorder
Music Therapy
As a Treatment Modality for
Autism Spectrum Disorders

What is Music Therapy?

Music Therapy is the clinical and evidence-based use of music interventions to accomplish individualized goals within a therapeutic relationship by a credentialed professional who has completed an approved music therapy program. It is a well-established allied health profession that uses music therapeutically to address behavioral, social, psychological, communicative, physical, sensory-motor, and/or cognitive functioning. Because music therapy is a powerful and non-threatening medium, unique outcomes are possible.

Music therapy may include the use of behavioral, biomedical, developmental, educational, humanistic, adaptive music instruction, and/or other models. Music therapy enhances one’s quality of life, involving relationships between a qualified music therapist and individual; between one individual and another; between the individual and his/her family; and between the music and the participants. These relationships are structured and adapted through the elements of music to create a positive environment and set the occasion for successful growth.

How Does Music Therapy Make a Difference for Individuals with Diagnoses on the Autism Spectrum?

Music therapy provides a unique variety of music experiences in an intentional and developmentally appropriate manner to effect changes in behavior and facilitate development of skills.

The literature reports that most individuals with ASD respond positively to music. People with ASD often show a heightened interest and response to music, making it an excellent therapeutic tool for working with them.

Music is a very basic human response, spanning all degrees of ability/disability. Music therapists are able to meet clients at their own levels and allow them to grow from there. The malleability of music makes it a medium that can be adapted to meet the needs of each individual. Music is motivating and enjoyable. Music can promote relatedness, relaxation, learning, and self-expression. Music therapy addresses multiple developmental issues simultaneously. Music therapy can provide success-oriented opportunities for achievement and mastery. The structure and sensory input inherent in music help to establish response and role expectations, positive interactions, and organization.

What Do Music Therapists Do?

Music therapists are trained professionals who accept referrals, observe clients’ behavior and interactions, and assess their behavioral, emotional, psycho-social, cognitive, academic, communication, language, perceptual, sensory, motor, and musical skills.

After designing realistic goals and target objectives to address identified needs, music therapists plan and implement individualized music therapy treatment programs with strategies, procedures, and interventions to develop skills necessary to achieve an optimum level of success or quality of life for individuals with diagnoses on the autism spectrum.

Music therapists document client responses, conduct ongoing evaluations of progress and performance, and make recommendations for future consideration. Music therapists work with team members and families, providing ways to include successful music therapy techniques that support...
treatment across all disciplines and in other aspects of clients' lives.

**Who is Qualified as a Music Therapist?**

A professional music therapist holds a bachelor's degree or higher in music therapy from one of over 70 American Music Therapy Association (AMTA) approved college and university programs. In addition to academic coursework, the bachelor's degree requires 1200 hours of clinical training, including a supervised internship. Graduate degrees in Music Therapy focus on advanced clinical practice and research.

Upon completion of the bachelor's degree, music therapists are eligible to sit for the national board certification exam to obtain the credential MT-BC (Music Therapist - Board Certified). The credential MT-BC is granted by a separate, accredited organization, the Certification Board for Music Therapists (CBMT), to identify music therapists who have demonstrated the knowledge, skills and abilities necessary to practice at the current level of the profession. For more information, contact the Certification Board for Music Therapists: www.cbmt.org

Music therapists also may be licensed, or registered, if a state licensure/registry process has been implemented by the state in which they are employed.

**Where Do Music Therapists Work?**

Music therapists may work with people with ASD in public school systems, where, in accordance with the Individuals with Disabilities Education Act (IDEA), music therapy is recognized as a related service that provides a "significant motivation and/or assist" in the achievement of Individual Education Plan (IEP) goals and objectives.

Music therapists also may provide service in the home, early intervention centers, Head Start programs, day care centers, specialized programs working in tandem with other professionals, day treatment centers, group homes, supportive employment sites, and at various venues within the community.

**Is there research to support Music Therapy services for ASD?**

Through peer-reviewed journals inside the profession such as the *Journal of Music Therapy* and *Music Therapy Perspectives*, and extensive articles in journals outside the profession, AMTA has promoted much research exploring the benefits of music therapy with individuals with diagnoses on the autism spectrum. Clinical outcomes studied have focused mainly on the use of music to address:

- Communication
- Cognition
- Behaviors (Problem/Repetitive/Stereotypic)
- Social Skills and Interaction
- Emotional Regulation

(AMTA, 2008)

The following statements represent targeted areas and rationale for using music therapy with individuals with ASD that have been the topics of published research, evidence-based practice, and/or clinical observations:

- Music holds universal appeal. It provides a bridge in a non-threatening setting between people and/or between individuals and their environment, facilitating relationships, learning, self-expression, and communication. Music captures and helps maintain attention. It is highly motivating and may be used as a natural "reinforcer" for desired responses.

- Music therapy can stimulate individuals to reduce negative and/or self-stimulatory responses and increase participation in more appropriate and socially acceptable ways.

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Music therapy can enable those without verbal language to communicate, participate and express themselves non-verbally. Very often music therapy also assists in the development of verbal communication, speech, and language skills. The interpersonal timing and reciprocity in shared play, turn-taking, listening and responding to another person are augmented in music therapy with children and adults with autism to accommodate and address their styles of communication.

Music therapy helps individuals with ASD identify and appropriately express their emotions.

Because music is processed in both hemispheres of the brain, it can stimulate cognitive functioning and may be used for remediation of some speech/language skills. Recent research notes that music may engage brain regions that overlap the human mirror neuron system (Wan et al., 2010).

Music provides concrete, multi-sensory stimulation (auditory, visual, proprioceptive, vestibular, and tactile).

The rhythmic component of music is very organizing for the sensory systems of individuals diagnosed with autism. As a result, auditory processing and other sensory-motor, perceptual/motor, gross and fine motor skills can be enhanced through music therapy.

Musical elements and structures provide a sense of security and familiarity in the music therapy setting, encouraging individuals with ASD to attempt new tasks in a predictable but malleable framework.

Music therapy focuses on strengths, which in turn may be utilized to address each individual’s areas of need. Many people with ASD have innate musical talents; thus, music therapy provides an opportunity for successful experiences.

For more information, please refer to AMTA’s Research and Literature Pertaining to Music Therapy and Autism Spectrum Disorders.

References:


How Can You Find a Music Therapist or Get More Information?

American Music Therapy Association, Inc.
8455 Colesville Road, Suite 1000
Silver Spring, Maryland 20910, USA
Phone: (301) 589-3300 Fax: (301) 589-5175
Website: www.musictherapy.org
E-mail: info@musictherapy.org

The American Music Therapy Association (AMTA) was founded in 1998 as a result of the union of the American Association for Music Therapy, (founded in 1971), and the National Association for Music Therapy, (founded in 1950), to ensure the progressive development of the therapeutic use of music in rehabilitation, special education, and community settings. AMTA is committed to the advancement of education, training, professional standards, credentials, and research in support of the music therapy profession.
APPENDIX B:

Stanley Greenspan's Developmental, Individual Differences, Relationship Based (DIR)/Floortime model
What is the DIR®/Floortime™ Model?

The Developmental, Individual Difference, Relationship-based (DIR®/Floortime™) Model is a framework that helps clinicians, parents and educators conduct a comprehensive assessment and develop an intervention program tailored to the unique challenges and strengths of children with Autism Spectrum Disorders (ASD) and other developmental challenges. The objectives of the DIR®/Floortime™ Model are to build healthy foundations for social, emotional, and intellectual capacities rather than focusing on skills and isolated behaviors.

- The D (Developmental) part of the Model describes the building blocks of this foundation. This includes helping children to develop capacities to attend and remain calm and regulated, engage and relate to others, initiate and respond to all types of communication beginning with emotional and social affect based gestures, engage in shared social problem-solving and intentional behavior involving a continuous flow of interactions in a row, use ideas to communicate needs and think and play creatively, and build bridges between ideas in logical ways which lead to higher level capacities to think in multicausal, grey area and reflective ways. These developmental capacities are essential for spontaneous and empathic relationships as well as the mastery of academic skills.

- The I (Individual differences) part of the Model describes the unique biologically-based ways each child takes in, regulates and responds to, and comprehends sensations such as sound and touch, and plans and sequences actions and ideas. Some children, for example, are very hyper responsive to touch and sound, while others are under-reactive, and still others seek out these sensations.

- The R (Relationship-based) part of the Model describes the learning relationships with caregivers, educators, therapists, peers, and others who tailor their affect based interactions to the child’s individual differences and developmental capacities to enable progress in mastering the essential foundations.

What is the difference between DIR® and Floortime™ and how are they related?

Central to the DIR®/Floortime™ Model is the role of the child’s natural emotions and interests which has been shown to be essential for learning interactions that enable the different parts of the mind and brain to work together and to build successively higher levels of social, emotional, and intellectual capacities. Floortime™ is a specific technique to both follow the child’s natural emotional interests (lead) and at the same time challenge the child towards greater and greater mastery of the social, emotional and intellectual capacities. With young children these playful interactions may occur on the “floor”, but go on to include conversations and interactions in other places. The DIR®/Floortime™ Model, however, is a comprehensive framework which enables clinicians, parents and educators to construct a program tailored to the child’s unique challenges and strengths. It often includes, in addition to Floortime™, various problem-solving exercises and typically involves a team approach with speech therapy, occupational therapy, educational programs, mental health (developmental-psychological) intervention and, where appropriate, augmentative and biomedical intervention. The DIR®/Floortime™ Model emphasizes the critical role of parents and other family members because of the importance of their emotional relationships with the child.

Assessment and Intervention Program using the DIR®/Floortime™ model

As a comprehensive framework, the DIR®/Floortime™ Model typically involves an interdisciplinary team approach including speech and occupational therapy, mental health professionals (e.g. social worker, psychologist, child psychiatrist), educational programs, and, where appropriate, biomedical intervention. After carefully assessing the child’s functional developmental level, individual differences and challenges, as well as relationships with caregivers and peers, the interdisciplinary team will, together with the parents, develop an
individualized functional profile that captures each child’s unique developmental features and serves as a basis for creating an individually tailored intervention program.

A comprehensive DIR®/Floortime™ intervention program includes consideration of the following components, tailored to the individual child’s profile:

1. **Home-based, developmentally appropriate interactions and practices, including**
   - *Floortime™ sessions:* These sessions focus on encouraging the child’s initiative and purposeful behavior, deepening engagement, lengthening mutual attention, and developing symbolic capacities through pretend play and conversations, always following the child’s lead.
   - *Semi-structured problem-solving:* These sessions involve setting up meaningful and relevant challenges to be solved in order to teach a child something new. The challenges can be set up as selected learning activities that are meaningful and relevant to the child’s experiences.
   - *Motor, sensory, sensory integration, visual-spatial, and perceptual motor activities:* These activities are geared to the child’s individual differences and regulatory patterns, building basic processing capacities and providing the support to help children become engaged, attentive, and regulated during interactions with others.
   - *Peer play with one other child:* Peer play should be started once a child is fully engaged and interactive, with parents providing mediation when necessary to encourage engagement and interaction between the children.

2. **Individual Therapies**
   - Speech, language, and oral motor therapy
   - Sensory motor and sensory integration based occupational therapy and/or physical therapy
   - Other therapies as required (e.g. mental health support and guidance)

3. **Educational program**
   - *For children who can interact and imitate gestures:* Integrated, inclusive program or regular school program with additional teacher or aide if needed
   - *For children not yet able to engage in preverbal problem solving or imitation:* Special education program with a strong focus on engagement and preverbal purposeful gestural interaction
   - *Transition educational-type programs with typical peers* (E.g. gymnastics, creative drama, etc)

4. **When indicated other interventions include:** Biomedical interventions, Nutrition and diet and Technologies geared to improve processing abilities

**How can I find an interdisciplinary team of professionals who have expertise in helping me to start using the DIR®/Floortime™ Model?**

The Interdisciplinary Council on Developmental and Learning Disorders (ICDL) is a non-profit organization founded by Stanley Greenspan, MD, and Serena Wieder PhD. ICDL provides training to a cadre of world class professionals across multiple areas of expertise, which are extending the reach of the DIR®/Floortime™ Model. For additional information please visit our website at www.icdl.com

**Recommended publications** (available at www.icdl.com)

- *Floortime™ DVD Training Series*
APPENDIX C:

Consent Forms
APPENDIX C: ADULT CONSENT TO PARTICIPATE

Project Title: *Examining the Potential Similarities and Influences of Stanley Greenspan’s Developmental, Individual Differences, Relationship Based (DIR)/Floortime model and Music Therapy in the Treatment of Children with Autism Spectrum Disorder*

Principal Investigator: **Jenna Kellogg, MT-BC (Music Therapist- Board Certified)**
Graduate Student, SUNY Fredonia
Kell5851@fredonia.edu, (716) 680-0286

The purpose of this study is to further explore the potential correlations and influences of Stanley Greenspan’s DIR/Floortime model for working with children with autism/disabilities and music therapy treatment. The DIR/Floortime model contains many similar qualities and techniques that are found in music therapy practice and the two can frequently complement each other when used together. I have chosen to interview you based on your current position as a special education teacher employed at Buffalo Hearing and Speech Center working within a designated “Greenspan” classroom. My research questions primarily pertain to your perspective on the relationship between Greenspan’s DIR/Floortime methods and individual music therapy treatment, and your experiences observing its influence on the education and development of your students in present and past school years. Here are some common questions that people may have about participating in this research study.

1. **If I choose to participate, what will the study involve (what will I do)?**

   You will participate in a one-to-one interview with me for 30 to 60 minutes. Questions will pertain to your experiences and observations in relation to music therapy in conjunction with Stanley Greenspan’s DIR/Floortime model.

2. **How long will I be involved in your study?**

   You will be interviewed one time for 30 to 60 minutes. In the event that further discussion and clarification is required, a follow-up interview will be scheduled.

3. **What are the potential benefits and the risks and/or discomforts of participating?**

   You will be given the opportunity to freely voice your thoughts and opinions on the subject of music therapy and the DIR/Floortime model during the interview. A possible discomfort of participating in this interview involves a dedication of your time (30-60 minutes). Potential benefits for participating in the interview include being given the opportunity for interdisciplinary discussion and open communication between therapist and teacher, and you might begin to consider the relationship between DIR/Floortime and music therapy more deeply. If at any time during the interview you decide that you would
not like to continue, you will be free to stop the interview without any penalty and the information obtained up until that time will not be used.

4. How will you maintain my anonymity? How will you make sure my data is confidential?

Your name will not be used within the transcription or analysis of the interview. Instead, a pseudonym will be assigned to you in order to ensure confidentiality. The name of the agency will also not be included in the final product. If you should choose to participate in the interview, it is reminded that you do not use the full names of any described children in order to protect their privacy and confidentiality.

5. Do I have to participate in the study?

Participation is voluntary, and you can withdraw your consent to participate at any time. You can withdraw your consent by contacting me at the e-mail listed in the researcher information at the top of this document. If you do withdraw your consent after participating, I will not use your data for the study. Withdrawing from the study will not harm your relationship with the researcher.

6. What if I have questions?

If you have questions about the study or about your rights as a research participant, you are welcome to contact me, Jenna Kellogg, (Phone: 716-680-0286, e-mail: kell5851@fredonia.edu). If you have questions and don’t feel comfortable talking to me, you can contact my faculty sponsor, Dr. Joni Milgram-Luterman, Director of Music Therapy, (Phone: 716-673-4648; email: joni.milgram-luterman@fredonia.edu) or Maggie Bryan-Peterson, Human Subjects Administrator and Director, Office of Sponsored Programs (Phone: 716-673-3528; e-mail: petersmb@fredonia.edu).

By signing below, I indicate my consent for participating in the interview. I also give my consent to be audio taped during the interview. A copy of the signed consent form will be given to me.

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Examinining the Potential

Sample Letter for Granting Access to "GreenSpan" Teachers

To Whom It May Concern:

I have read the protocol presented by Jenna Kellogg (student researcher). I understand that the purpose of this thesis research study, titled “Examining the Potential Similarities and Influences of Stanley Greenspan’s Developmental, Individual Differences, Relationship Based (DIR)/Floortime model and Music Therapy in the Treatment of Children with Autism Spectrum Disorder,” is to further explore Stanley Greenspan's DIR/Floortime model and music therapy treatment and the connections between these two modalities. I understand that the primary questions of this study are:

- In what ways do the teachers trained in Greenspan’s DIR/Floortime method feel that individual music therapy has contributed to the education and development of their students in present and past school years?
- In what ways do the teachers describe the similarities and relationships between the two approaches?
- In what ways do the teachers describe their individual processes for determining if a child would benefit from music therapy services?

For teachers who agree to participate in an interview for this study, I understand that the researcher will require approximately 30-60 minutes to complete the interview.

I understand that the researcher will not use the names of the teachers or the agency in her publications and presentations, and that all data will be kept by Jenna Kellogg in locked or password-protected files.
APPENDIX D:

Interview Questions
INDIVIDUAL INTERVIEW GUIDE

1. Describe your history as a special education teacher
   - educational background
   - past jobs
   - populations worked with
   - age groups worked with
   - length of time working within special education realm

2. Describe your current teaching position at BHSC

3. What teaching philosophy do you feel you align with the most?

4. What knowledge did you have of the Greenspan method before beginning at BHSC?

5. What training(s) have you completed for DIR/Floortime?

6. What do you feel are some of the key strengths of the Greenspan method?

7. What do you feel are some of the weaknesses of the Greenspan method?

8. To what effect(s) do you feel the use of the Greenspan method has had for the students in your classroom?

9. What was your knowledge of the music therapy profession before beginning at BHSC?

10. For what populations have you heard of music therapy treatment being used for?

11. Describe how the students in your classroom respond and interact during group music therapy sessions

12. Are there certain personality characteristics that you have observed within your students that often predict success within group music therapy sessions?

13. What major changes have you seen within your classroom that you attribute to group music therapy treatment over a school year time span?

14. What are some of the qualities and characteristics that influence your decisions to recommend a child for individual music therapy services?

15. What developmental benefits have you observed in children overtime who are receiving individual music therapy treatment?
16. Can you give an example of a “before and after” music therapy treatment situation in which you can describe the characteristics of a child before receiving individual music therapy treatment, and then after receiving individual music therapy treatment?

17. What aspects of individual music therapy treatment do you feel have been the most beneficial/successful for your students in past and present school years?

18. What aspects/components would you like to see more of within group and individual music therapy sessions?

19. What do you feel are some similarities between the Greenspan model of working with children with autism, and music therapy treatment?

20. What do you feel are some of the differences between these two modalities?

21. In what ways do you feel these two modalities can be interwoven together in a co-treatment setting/situation?

22. What is your overall stance on combining music therapy treatment and the Greenspan model for working with children with autism and other disabilities?