

MUSIC THERAPY FOR CHILDREN WITH SPECIAL NEEDS

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Abstract

“Special Needs” is an umbrella over an array of diagnoses. Children with special needs may have mild to severe learning disabilities or profound mental retardation; food allergies or terminal illness; developmental delays that catch up quickly or remain entrenched; psychological disorder or serious psychiatric problems. The designation is useful for getting needed services, setting appropriate goals, and gaining understanding of a child and stressed family. Music has positive developmental effect on children. This is based on the long-understood principle of “transfer of learning”. Studies have shown that music benefits (a) language learning, (b) memory process, (c) spatial and intelligence development, (d) motor skills and body awareness, (e) social skills, (f) discipline, and (g) sleep. Music therapy has been identified as an emerging therapy approach to teaching a variety of skills to children with special needs. Music therapy is non-threatening and enjoyable for children to express themselves so as to be understood by others, and to train educational and functional skills. In this workshop, participants will learn the protocol and skills used to creatively conduct music therapy for children with special needs.

I. WHAT IS SPECIAL NEEDS?

“Special Needs” is an umbrella over an array of diagnoses. Children with special needs may have mild to severe learning disabilities or profound mental retardation; food allergies or terminal illness; developmental delays that catch up quickly or remain entrenched; psychological disorder or serious psychiatric problems.

“Special needs” are commonly defined by what a child *can't* do - by milestones unmet, foods banned, activities avoided, or experiences denied. These minuses may make “special needs” seem like a tragic designation for the family. Some parents may mourn their child's lost potential, while others find that their child's challenges make triumphs sweeter, resulting in displaying amazing strengths.

In this workshop, the author uses Terri's (2006) definition of children with special needs. It is define by medical, behavior, developmental, and learning issues.

(a) Medical Issues

Medical issues for children with special needs include serious conditions like cancer and heart defects, muscular dystrophy and cystic fibrosis; chronic conditions like asthma and diabetes; congenital conditions like cerebral palsy and dwarfism; and health threats like food allergies and obesity. These children may require numerous tests, long hospital stays, expensive equipment, and accommodations for treatment.

(b) Behavior Issues

Children with behavior issues do not respond to traditional and usual discipline such as autism, ADHD, selective mutism, fetal alcohol spectrum disorder, and dysfunction of sensory integration. They require specialized strategies that are tailored to their specific abilities and disabilities. If those strategies are not developed and used, children with behavior issues are seriously at risk for school problems.

(c) Developmental Issues

This group of children includes Down syndrome, academically sub-normal, and mental retardation often cause children to be removed from the mainstream education.

(d) Learning Issues

This group of children includes children with learning disabilities such as dyslexia and Central Auditory Processing Disorder. These children struggle with schoolwork regardless of their intellectual abilities. They require specialized learning strategies to meet their potential, and to avoid self-esteem problems and behavioral difficulties.

II. MUSIC THERAPY

Music is every where. It is found in quite romantic dinning places, and it is also found in the loud clubs. There are lots of different music and people choose to listen to the music that pleases them. Music is an art form in which there is a system of rules and regulations. It is a medium of sound organized in time. The basic units of sound are notes, and the basic units of time are beats. The common elements of music are pitch (which governs melody and harmony), rhythm (and its associated concepts tempo, meter, and articulation), dynamics, and the sonic qualities of timbre and texture (Wikipedia, 2008).

Music has a powerful effect on our emotions. We know that a quiet, gentle music can soothe, and a majestic chorus can arouse excitement. Music can heal. The way music fires the neurons in the brain to the tempo it is played, helps bring into play the characteristics that bring the biggest healing benefits to an individual.

Music also has effect on mental development. This is based on the long-understood principle of “transfer of learning”. That is, if one learning situation involves factors that can also be used in a later different learning situation, the knowledge or skills gained will facilitate the later learning.

The power, range and effectiveness of music have many variables. Below are certain variables that are universal (Peaceful Mind, 2007).

- (a) Music captivates and maintains attention, stimulates and utilizes many parts of the brain.
- (b) Music is adapted to, and can be reflective of a person's ability.
- (c) Music structures time in a way that we can understand.
- (d) Music provides a meaningful, enjoyable context for repetition.
- (e) Music sets up a social context that is safe and structured for verbal and nonverbal communication.
- (f) Music is an effective memory aid.
- (g) Music supports and encourages movement.
- (h) Music taps into memories and emotions.
- (i) Music and its related silence, provide nonverbal and immediate feedback.
- (j) Music is success oriented and people of all ability levels can participate.

III. BENEFITS OF MUSIC

Studies have shown that music benefits (a) language learning, (b) memory process, (c) spatial and intelligence development, (d) motor skills and body awareness, (e) social skills, (f) discipline, and (g) sleep.

(a) Music Encourages Development of Language

Musical training helps develop brain areas involved in language. Studies have clearly indicated that musical training physically develops the left side of the brain known to be involved with processing language (Rauscher et al., 1997; Chen-Hafteck, 1997; Brown et al., 2006).

Songs help to teach phonemic awareness by putting new words to familiar tunes for the purpose of teaching sound isolation skills (Towell, 2001). The predictability of sing-along

picture songbooks has been shown to be effective in helping children read. The familiar rhythm of the songs helps develop fluency (Schaffer, 2001).

Research demonstrates that music used in the curriculum can enhance literacy skills. Musical cueing is effective in improving word recognition, logo identification, print concepts, and prewriting skills of children in early intervention programs. Shared reading paired with song rehearsal of text facilitates greater text accuracy than spoken rehearsal amongst kindergarten students (Register, 2001).

(b) Music Encourages Memory

Nicolette et al. (2002) studied the effect of music on student's recall and memory. The target populations were three suburban elementary schools: (a) a kindergarten classroom students; (b) a second grade classroom students and five Individualized Education Program (IEP) students; and (c) a fifth grade classroom. These students exhibited difficulty recalling facts and information in a variety of subject areas and this was seen in their inability to gain mastery of grade level skill areas. The musical techniques proved to be helpful in increasing student's recall because the songs helped with phonemic training, mnemonics, setting desired skills to familiar tunes, and linking connection to cultural themes. The findings also showed that preschool children who were given songs showed an IQ advantage of 10 to 20 points over those children taught without exposure to the songs.

Chan et al. (2003) studied a group of 90 schoolboys, aged 6-15, half of whom received music training in their school's string orchestra for between 1-5 years, and the other half had no training. The boys were all tested for verbal memory by reading them a list of words and asking them to recall as many as possible 10 minutes after the test, and then 30 minutes after. They were then shown a series of images and asked to recall them. Each student was tested three times. The team found that students with music training recalled significantly more words than those without music training. After 30 minutes, the students with music training still retained more words than those without music training.

(c) Music Encourages Development of Spatial and Intelligence

There is a causal link between music and spatial intelligence (the ability to perceive the world accurately and to form mental pictures of things). Rauscher et al. (1993) found that a group of 36 college undergraduates improved their spatial-temporal intelligence (the ability to mentally manipulate objects in three-dimensional space) after listening to 10 minutes of Mozart sonata. Results showed those students' IQ scores improved by 8-9 points. The findings which were later dubbed the Mozart effect, received both criticism and support.

Rauscher and Zupan (1999) conducted a research in the Kindergarten classes of the school district of Kettle Moraine, Wisconsin. Children who were given music instruction scored 48% higher on spatial-temporal skill tests than those who did not receive music training.

In promoting music and intelligence, Shaw (1997) reported that music training is far superior to computer instruction in dramatically enhancing children's intelligence, abstract reasoning skills, and math and science skills.

(d) Music Promotes Motor Skills and Body Awareness

Children can gain a better mental picture of their own body through music. It is the first step towards developing internal control and self-discipline. Body awareness helps children become aware of their feelings, minds and bodies. Body awareness is also important in the development of spatial orientation. Children who do not perceive the space of their own bodies may frequently misjudge distances or bump into things. It also helps with development of motor skills. Creative movement music activities help to develop body awareness, motor fitness, rhythmic skill, strength, flexibility, coordination, endurance, and physical vitality (Mayer, 1996).

(e) Music Improves Social Skills

Music-facilitated interactions are effective in improving social skills in school-age populations. Social problem solving skills in 5-year old students are increased on a

long-term basis through creative musical activities. The positive effect induced by music improved social problem solving skills in middle school students (Bryan et al, 1998; Ulfarsdottir & Erwin, 1999).

(f) Music Enhances Discipline

Music enhances teamwork skills and discipline. During the music presentation, all children must work together harmoniously towards the performance. The children must commit to learning music, attending rehearsals, and practicing to ensure success in the performance (Children's Music Workshop, 2006).

(g) Music Improves the Quality of Sleep

Research conducted by Tan (2004) examined the effects of music on quality of sleep in elementary school children. Sleep quality was measured using the Pittsburgh Sleep Quality Index (PSQI) at pretest and three weekly posttests. Results showed that subjects who received music at naptime everyday and bedtime each night for three consecutive weeks had significant improvement in global sleep quality over time. Improvements were also observed in all six components of the PSQI although significant improvements were only observed in sleep duration and sleep efficiency.

IV. WHAT IS MUSIC THERAPY?

In 1996, the World Federation of Music Therapy (WFMT) defined music therapy as the use of music and/or its musical elements (sound, rhythm, melody and harmony) by a qualified music therapist with a client or group, in a process designed to facilitate and promote communication, relationships, learning, mobilization, expression, organization and other relevant therapeutic objectives in order to meet physical, emotional, mental, social, and cognitive needs. Music therapy aims to develop potentials and/or restore functions of the individual so that he or she can achieve better intra and/or interpersonal integration and, consequently, a better quality of life through prevention, rehabilitation or treatment.

In this workshop, music therapy is defined as using musical elements for a group of children with special needs to facilitate and promote:

- (1) motor skills – fine and gross;
- (2) body movement by balancing and coordination;
- (3) language and speech skills – receptive (understanding and obeying instruction) and expressive (reading and answering questions);
- (4) basic words concept – colours; shapes; numbers; body parts; instruction up and down; left and right; front and back etc;
- (5) social skills; and
- (6) sensory desensitization.

V. ROLE OF MUSIC THERAPY FOR CHILDREN WITH SPECIAL NEEDS

Music therapy is a complex, multi-faceted treatment that has been used to address numerous needs faced by children today. Music therapy improves the quality of life for these children and meets the needs of children with disabilities or illnesses (American Music Therapy Association, 2005). It has been proven useful in helping children with special needs, such as:

- (a) Children with Grief/Bereavement Symptoms and Behaviors Problems (Hilliard, 2001)
- (b) Children with Autism (Gold et al., 2006)
- (c) Children with Myotonic Dystrophy (Kennedy & Kua-Walker, 2006)
- (d) Children with Specific Reading Disabilities (Register et al., 2001)
- (e) Children with Aggressive Behavior (Choi et al., 2008)
- (f) Children with Cerebral Palsy (Metro Music Therapy Inc., 2006)
- (g) Children Affected by Crisis or Trauma (American Music Therapy Association, 2008)
- (h) Children with Psychopathology (Gold, 2007)

VI. PROTOCOL OF MUSIC THERAPY

The following materials and preparation need to be done before the Music Therapy:

(a) Music Q & A Cards

Parents will be given a Q & A card list. Parents will have to prepare 5 questions and 5 answers in a card form according to the list. As the child progresses and is able to answer the questions, the parents can change the questions according to the music teacher's advice.

(b) Name Tag

Children will be given a name tag. Parents have to ensure that their child brings their name tag each time they attend the music session. The child will have to drop the name tag into the name tag box when they enter the music hall.

(c) Attendance Card

An attendance card will be done for the child. The card is kept in the attendance box in the music cabinet.

(d) File

A file will be open for the child to keep the child's record and the assessment forms.

Below are step-by-step protocols that a music teacher can follow to run the music therapy session. Each music therapy session will last for an hour.

Step I: Preparation Before The Session

1. The music teacher will have to take out all the equipments and instruments needed such as:
 - Mini compo
 - Music Manual
 - Cassette
 - Posters (according to the music set)

- Poster hanger
 - Name tag box (a box for children to put in their name tags)
 - Attendance cards and stickers
 - Attendance box (a box to keep the attendance cards and stickers)
 - Hula hoops (depending on how many groups you have)
 - Musical instruments:
 - sticks, bells, castanets, balls, drums, whistle, etc.
2. The children need to bring their name tag and also the selected Music Q & A cards.

Step II: Preparation Before The Greeting Section

1. The music teacher will put the name tag box in front of the group so that children can drop their name tag into the box.
2. The music teacher will arrange hula hoops in front for the greeting section. The number of hoops to be arranged depends on the number of groups one has in a session. The number of groups is depended on the number of children and the number of facilitators available to assist the music teacher, and also the space available in the music hall. The total number of children divides by the number of facilitator will determine how many group(s) you would have in the greeting section. Then, arrange the number of hoops accordingly.
3. As the children enter the music hall, they will drop their name tags into the name tag box and find a place to sit.
4. The children can be seated either in circle or rows, depending on the size of the group and the size of the hall. For example, if the group is small i.e. about 10 children, they can be seated in circle. If the group is bigger i.e. more than 20 children, then they can be seated in 2-3 rows.
5. Parental involvement is encouraged and a parent can be seated behind their own child.
6. The children are required to bring in their Q & A cards. Each child will bring five questions and five answers per session.

7. At the set time, the door of the music hall will be closed. Children who are late will not be able to participate in the greeting section of the music therapy.
8. The music teacher and the facilitator (if available) will then start the greeting section according to the groups you have. If you have more than one group, you may want to assign a facilitator to each group.

Step III: Greeting Section Starts

1. The music teacher or facilitator (if available) will sing "Where is (child's name) ? Where is (child's name) ? (according to the tune of 'Are you sleeping').
2. The specific child will have to put up his /her hand when his/her name is called and answer by singing, "Here I am, Here I am." (according to the tune of 'Are you sleeping').
3. The child will then take his/her Q & A cards to the music teacher or facilitator (if available) who called his / her name and sit down in the hoop.
4. The music teacher or facilitator (if available) will then hold the child's hand and sing "How are you this evening?" (according to the tune of 'Are you sleeping?')
5. The verbal child will sing "I am fine. I am fine." or "Very well, I thank you. " (according to the tune of 'Are you sleeping?').
6. The non-verbal child will sign while the music teacher or facilitator (if available) sings for the child.
7. The music teacher or facilitator (if available) will then take out the Q & A cards which consist of the question cards and the answer cards.
8. The music teacher or facilitator (if available) will arrange the answer cards on the floor while she/he holds the question cards. Each question card is placed in front of the child so that when the music teacher or facilitator (if available) read and point at the question, the child has the visual cue.
9. The child has to choose the correct answer card pertaining to the question asked and give it to the music teacher or facilitator (if available).
10. For the verbal children, the child will have to read the answer aloud.
11. For the non-verbal children, the music teacher or facilitator (if available) will read the answer aloud while the child point to the answer.

12. After finishing all 5 questions, the music teacher or facilitator (if available) will give the child the name tag to wear on the left hand corner on the shirt.
13. The music teacher or facilitator (if available) will repeat the whole process for every child until all names is called.
14. At the end of the greeting section, the door to the music hall will be opened for the late comers.

Step IV: Music and Movement Section Starts

1. The music teacher will run this section according to the music sequence set that has been scheduled.
2. At the start, the music teacher gives instruction to the children to find a partner for the 'Hello song'. The pair can sit anywhere they like within the music hall.
3. After the hello song, the children will return to be seated in the circle or straight rows. The children will maintain in this seating position throughout the whole music sequence.
4. As for the singing time, the children will move to face the front where the poster is hanged. Children will be seated in rows (depending of the number of children and the size of the hall) with the shorter children sitting in front and the taller children sitting behind.

Step V: Goodbye Section

1. Towards the end of the session, the children will sing "So long, farewell, it's time to say goodbye... goodbye... goodnight" (according to the tune of Sound of Music) while waving hands to their friends.
2. The children have to be seated while waiting for their name to be called by the music teacher or facilitator (if available). The music teacher will take the attendance card out from the attendance card box and called the children's name one by one.
3. The child whose name is called will go out to the front to collect his/her attendance card and a sticker from the music teacher or facilitator (if available).

4. The child will come back to his/her place and sticks the sticker on the attendance card.
5. All the children will have to line up to return the attendance card to the music teacher.
6. When it is his/her turn, the child will give the card to the music teacher, then 'salam' and say goodbye to the music teacher.

Step VI: Clean Up

1. The music teacher and the facilitator (if available) will keep all the equipments and instruments.
2. The music teacher will ensure that everything is kept and lock up all the music cabinets and the music hall.

VII. CONCLUSION

Music and music activities are used to address physical, psychological, cognitive and social needs of children with special needs. In this workshop, the author uses clinical and evidence-based music intervention to accomplish individualized goals of children with special needs. Many mental health professionals and special educators are aware of the therapeutic effect of music but not many truly understand the in-depth theory and practice of music therapy. Due to growing public interest in music therapy as well as among the allied health professionals and special educators, this workshop aims to provide participants with an understanding of the practice and protocol of music therapy in healthcare and educational settings.

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