

Music Therapy: An Approach Used To Train Children with Autism Spectrum Disorder

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Abstract

Music therapy is an emerging approach to teach a variety of skills to children with special needs. Music therapy is a non-threatening and enjoyable way for these children, who struggle with both expressive and receptive communication, to find a way to express themselves so as to be understood by others. It is also used to train motor coordination, behavior and functional academic skills. Research was conducted in Malaysia which shows that music therapy is an effective medium in training children with autism and a program was developed. The music therapy protocol is proposed and can be used by anyone with no formal music training.

Key Words: Music Therapy, Autism

Introduction

Autism was first identified in 1943 by Dr. Leo Kanner of Johns Hopkins Hospital. At the same time, a German scientist, Dr. Hans Asperger, described a milder form of the disorder that is now known as Asperger Syndrome. These two disorders are listed in the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) as two of the five developmental disorders that fall under Autism Spectrum Disorders. The others are Rett Syndrome, Pervasive Developmental Disorder, and Childhood Disintegrative Disorder. All of these disorders are characterized by varying degrees of impairment in language and communication skills, social abilities and repetitive behaviors. Autism is a complex developmental disability that is typically manifested during the first three years of life and is believed to be the result of a neurological disorder that affects the normal functioning of the brain, impacting development in the areas of social interaction and communication skills. One should keep in mind however, that autism is a

spectrum disorder and it affects each individual differently and at varying degrees from severe to mild - this is why early diagnosis is so crucial (Autism Society Connecticut, 2009).

General Features of Autism

All children with autism demonstrate deficits in (a) social interaction; (b) verbal and nonverbal communication; and (c) behaviors. They are described in more comprehensive details below.

(a) Social Interaction Deficit. Children with autism have tremendous difficulty in engaging with the give-and-take of everyday human interaction. Even in the first few months of life, many do not interact and avoid eye contact. They seem indifferent to other people, and prefer being alone. They resist attention or passively accept hugs and cuddling. They seldom seek comfort or respond to parents' displays of anger or affection in a typical way. Research suggested that although children with autism are attached to their parents, their expression of this attachment is unusual and difficult to "read." Parents who looked forward to the joys of cuddling, teaching, and playing with their child may feel crushed by this lack of the expected and typical attachment behavior. Children with autism are also slower in learning to interpret what others are thinking and feeling. Subtle social cues-whether a smile, a wink, or a grimace-may have little meaning. To a child who misses these cues, "Come here" always means the same thing, whether the speaker is smiling and extending her arms for a hug or frowning and planting a spank on her hips. Without the ability to interpret gestures and facial expressions, the social world may be bewildering. To compound the problem, children with autism have difficulty seeing things from another person's perspective. Most five-year-olds understand that other people have different views, feelings and goals than they have. A child with autism may lack such understanding. This results in their inability to predict or understand other people's actions. Although not universal, it is common for children with autism also to have difficulty regulating their emotions. This can take the form of "immature" behavior such as crying or verbal outbursts that seem inappropriate to those around them. Children with autism might also be disruptive and physically aggressive at times, making social relationships difficult. They will have a tendency to "lose control," particularly when they're in a strange or overwhelming environment, or when angry and frustrated. They may at times break things, attack others or

hurt themselves. In their frustration, some bang their heads against objects, pull their hair or bite their arms.

(b) Verbal and Nonverbal Communication Deficit. Children with autism rarely remain mute throughout their lives but may be delayed, developing language as late as age five to nine. Others learn to use communication systems such as pictures or sign language. Those who do speak often use language in unusual ways. They seem unable to combine words into meaningful sentences. Some speak only single words, while others repeat the same phrase over and over. Children with autism who parrot what they hear display a condition called echolalia. Children with mild forms may exhibit only slight delay in language, or in some areas even seem to have precocious language ability and unusually large vocabularies, but they will have great difficulty in sustaining a conversation. The “give and take” of normal conversation is hard for them, and they often carry on a monologue on a favorite subject, giving no one else an opportunity to comment. Another difficulty is the inability to understand body language, tone of voice, or “phrases of speech.” They might interpret a sarcastic expression such as “Oh, are you that smart!” as meaning YOU ARE SMART. It is hard to understand what children with autism are saying and their body language is also difficult to understand. Facial expressions, movements and gestures rarely match what they are saying. Also, their tone of voice fails to reflect their feelings. A high-pitched, sing-song, or flat, robot-like voice is common. Some children with relatively good language skills speak like little adults, failing to pick up on the “kid-speech” that is common in their peers. Without meaningful gestures or the language to ask for things, children with autism are at a loss to let others know what they need. As a result, they may display behavior such as screaming or grabbing what they want. As children with autism grow up, they can become increasingly aware of their difficulties in understanding others and in being understood. As a result they may become anxious or depressed.

(c) Behaviors. Children with autism appear physically normal and have good muscle control but display odd repetitive motions. These behaviors might be extreme and highly apparent or more subtle. Some children and older individuals spend a lot of time repeatedly flapping their arms or walking on their toes. Some suddenly freeze in position. As children, they might spend hours lining up their cars and trains in a certain way, rather than using them for pretend play. If someone accidentally moves one of the toys, the child may be very upset.

Children with autism like to have a fixed daily routine in their environment. A slight change in any routine - in mealtimes, dressing, taking a bath, and going to school at a certain time and by the same route - can be extremely upsetting. Rules are also important. It may be difficult for a child with autism to take a different approach to something once they have been taught a 'certain' way to do it. Children with autism may not be comfortable with change, but can cope well if they are prepared for it in advance. Repetitive obsessive behavior sometimes takes the form of a persistent, intense preoccupation. For example, the child might be obsessed with learning all about vacuum cleaners, dinosaurs or cars. Often there is great interest in numbers, symbols or science topics.

Children with autism may experience some form of sensory sensitivity. This can occur in one or more of the five senses - sight, sound, smell, touch and taste. A person's senses are either intensified (hypersensitive) or under-sensitive (hypo-sensitive). For example, a child with autism may find certain background sounds, which other people ignore or block out, unbearably loud or distracting. This may cause anxiety or temper tantrum. On the other hand, children who are hypo-sensitive may not feel pain or extremes of temperature. They may rock, spin or flap their hands to stimulate sensation.

It is important to understand that children with autism often have learning disabilities. They have different 'degrees' of learning disability, so some will be able to live fairly independently - although they may need a degree of support to achieve this - while others may require lifelong support. However, all children with autism do learn and develop with the right kind of support. Music therapy is one of the treatment interventions for children with autism.

What Is Music Therapy?

Music therapy is a holistic form of therapy which involves the skillful use of music as a therapeutic tool to restore, maintain and/or improve a person's physical, emotional, social, cognitive and psychological well-being regardless of age, musical background or challenges. Because music is a universal language, its unique qualities make it an effective and distinctive mode of therapy with both children and adults of varying needs, abilities and languages, providing a positive outlet of self-expression and release of built-up energy. 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. According to the American Music Therapy Association (2005), music therapy uses music to address physical, emotional, cognitive, and social needs of individuals of all ages. Music therapy improves the quality of life for persons who are well and meets the needs of children and adults with disabilities or illnesses. Music therapy intervention is designed to promote wellness, manage stress, alleviate pain, express feelings, enhance memory, improve communication, and promote physical rehabilitation. In this paper, music therapy is defined as using musical elements for children with special needs to facilitate and promote (1) social skills; (2) language and speech skills – receptive (understanding and obeying instructions) and expressive (reading and answering questions); (3) basic words concept – colors; shapes; numbers; body parts; instruction up and down; left and right; front and back etc; (4) motor skills – fine and gross; (5) body movement by balancing and coordination; and (6) sensory desensitization.

Role of Music Therapy for Children with Autism

Music therapy is one of the treatment interventions for children with autism. It has been proven useful in helping them in many aspects, such as:

(a) Interrupt Patterns of Isolation and Social Withdrawal. Social withdrawal and isolation such as lack of eye contact, lack of physical responsiveness, aloofness, lack of peer relations, often obsessive preoccupation with objects, and maintenance of environmental sameness have been viewed as primary autistic features (Thaut, 1984). Breaking the pattern of isolation and engaging the autistic individual in external rather than internal activities and relationships can prove central to addressing other cognitive and perceptual problems. Music therapy can provide an initial object relationship with an instrument. The instrument can serve as an intermediary between child and music teacher, providing an initial point of contact. Music

and musical experiences can provide infinite kinds of relationships which can be the key to successful therapy for children with autism. Alvin (1975) worked with children with autism and was able to draw them slowly outward by using music to develop a series of relationships between the child and the instrument, the child and the therapist, the child and the music, and the child and other children, and so on. Once the barrier is interrupted and contact established, the music therapist can pursue a variety of structured musical experiences that continue to engage these children and draw them further from their internal, ritualistic world. While the process can be slow and arduous, music therapy provides an unusual and pleasurable tool that can be easily adapted to meet the changing needs of these children. Reid et al. (1975) found music to be instrumental in teaching social skills which, in turn, facilitated the normalization of a child who had previously been isolated from everyday events. Further, they found that the behavior changes accompanying music interventions generalized to non-music settings. Schmidt et al. (1976) also found music to be highly effective in shaping and reinforcing appropriate social behavior. Also significant in music therapy for children with autism, is that all musical experiences can be structured for success. Although interactions may be limited by language problems, social relations can become warm and mutually satisfying if the child with autism learns that he or she can succeed in the adapted, therapeutic environment. Nelson et al. (1984) suggested that the social disability of autism may be the most treatable part of the disorder, especially in the context of music therapy, since it depends more on the quality of the experiences in their environment than on their underlying neuropsychological characteristics.

(b) Facilitate Verbal and Nonverbal Communication. Music therapy techniques attempt to address speech/vocalization production processes and to stimulate mental processes in respect to conceptualization, symbolization, and comprehension (Thaut, 1984). On the most basic level, effect is put on supporting the desire or necessity for communication. Children with autism might perceive such sounds more easily or readily than verbal approaches. The awareness of the music and the relationship between the music and the children's own actions might serve to motivate communication. As the children with autism begin to display communicative (verbal or nonverbal) intentions and responses, music can be used to encourage speech and vocalizations. Alvin (1975) suggested that learning to play with instruments is in some ways, equivalent to learning to make speech vocalizations. It can also strengthen

awareness and functional use of lips, tongue, jaws, and teeth. The use of melodic/rhythmic patterns and verbal instructions during music therapy have been found to be beneficial in maintaining better attention to and comprehension of the spoken word (Thaut, 1984). Nelson et al. (1984), in a review of literature, found reports of music games being associated with a child's first purposeful speech production. Litchman (1976) found significant increases in language comprehension when music was used in the learning environment. Alvin (1975) also pointed out that music can serve as an important link between parent and child, providing a channel of communication and a model where both parties can relate to each other. Music therapy is also proven useful in reducing instances of non-communicative speech patterns which can impede progress in learning functional language skills. The research conducted by Bruscia (1982) showed that the music therapy was useful in the assessment and treatment of echolalia. The treatment procedures employed reduced the subjects' echolalia from 95 percent of total utterances to fewer than 10 percent in any setting.

(c) Decrease Behavior Characteristics of Poor Perceptual and Motor Functioning.

Music therapy can decrease behaviors or break stereotyped motility patterns. Rhythmic activities and movement to music at tempo other than that of body rocking, for instance, can be helpful in this regard (Thaut, 1984). Soraci et al. (1982) found that music possessing particularly rhythmic characteristics was effective in reducing stereotypical behaviors. The music therapist can also structure the musical experience to ensure that movement responses to music are adaptive and non-repetitive in nature (Nelson et al., 1984). The child with autism can begin to exercise perceptual processes, and learn to relate tactile, visual, and auditory stimulation through manual exploration of instruments. Movement to music can also aid in the integration of tactile/kinesthetic and auditory perception and the differentiation of self/non-self (Thaut, 1984). Action songs are beneficial in helping to develop auditory-motor coordination and more refined body awareness/image (Alvin, 1975). Functional use of fingers and hands can be practiced by playing with musical instruments. On a more complex level, perceptual learning sequences can combine pitch, loudness, and tempo, teaching the child to respond to percussion instruments.

(d) Facilitate Creative Self-Expression and Promote Emotional Satisfaction.

Children with autism display a marked lack of affective responses to stimuli which some authors

(Nelson et al., 1984) have hypothesized is due to some defect in the process by which pleasurable or meaningful stimuli is aroused. Since many children and adults with autism respond relatively positively to musical stimuli, it becomes relevant that music has often been used to motivate and encourage them. The positive affective responses of these children can enhance their participation in other activities designed to facilitate social, language, and perceptual-motor functions. In addition, music may also provide a useful context for encouraging the development of curiosity and exploratory interest in stimuli simply by virtue of the fact that it is pleasurable (Nelson et al., 1984). Alvin (1975) contends that the music therapist and setting must be conducive to ensure that the children are deriving pleasure from the experience. The children are free to behave in certain ways (i.e., making noise, shouting, banging instruments) as well as free from fear, of reprisals, threatening stimuli, etc. The music therapy setting also allows children to discover and express at their own pace and chosen way. It provides a non-threatening means of communication and expression which is also pleasurable for many children with autism, and it promotes a sense of emotional satisfaction. As Nelson et al. (1984) pointed out, music therapy is not just a process of using a child's strengths to improve his or her weaknesses, but it is also a process of refining and improving the child's strengths. For autistic children demonstrating an aptitude for music, the world of music can provide a socially valued arena for the expression of competence and the attainment of self-worth. Learning to sing or play an instrument can have long term value even to a child who has many inherent limitations in terms of language and social functioning.

Protocol of Music Therapy

Over the past 15 years, the author with input from some music teachers and therapists has developed the following protocol for children with autism. It is noted that music therapy is conducted by a teacher or facilitator who is trained. The parents are required to be present with the autistic child. 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. (Refer to Appendix 1)

(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. (Refer to Appendix 2)

(c) Attendance Card. Each child will have an attendance card kept in the attendance box. (Refer to Appendix 3)

(d) File. A file for the child will be opened to keep the child's record and 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 set up the equipment 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), and musical instruments (sticks, bells, castanets, balls, drums, whistle, etc.) required.
- (2) The children need to bring their name tags 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 children in the session. The total number of children divided by the number of facilitators will determine the number of groups you 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 a circle. If the group is bigger i.e. more than 20 children, then they can be seated in rows.
- (5) Parental involvement is encouraged and a parent can sit behind their child.
- (6) The children are required to bring 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 card 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 today?” (according to the tune of ‘Are you sleeping?’)
- (5) The verbal child will sing “Very well, I thank you. I am fine. I am fine.” (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) reads and points 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 verbal children, they will have to read the answer aloud.

(11) For non-verbal children, the music teacher or facilitator (if available) will read the answer aloud while the children point to the answer.

(12) After finishing all 5 questions, the music teacher or facilitator (if available) will give the child his/her name tag to wear on the left hand corner of the shirt.

(13) The music teacher or facilitator (if available) will repeat the whole process for every child until all names have been called.

(14) At the end of the greeting section, the door to the music hall will be opened for 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. Please refer to Appendix 4 for an example of a synopsis of the music and movement section.

(2) At the start, the music teacher instructs 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 a circle or straight rows. They will maintain this seated position throughout the whole music sequence.

(4) As for the singing time, the children will face the front where the poster is hung. Children will be seated in rows (depending on the number of children and the size of the hall) with shorter children sitting in front and taller ones sitting behind them.

Step V: Good Bye Section

- (1) Towards the end of the session, the children will sing “So long, farewell, it’s time to say good bye... good bye... good day/good night” (according to the tune of Sound of Music) while waving to their friends.
- (2) The children have to be seated while waiting for their names to be called by the music teacher or facilitator (if available). The music teacher will take the attendance card out of the attendance card box and call a child’s name, one by one.
- (3) The child whose name is called will go 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 stick the sticker on the attendance card.
- (5) All of 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 shake the music teacher’s hand and say good bye.

Step VI: Clean Up

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

Step VII: Target Behavior and Skills Checklist

There is an assessment form called ‘Target Behavior and Skills Checklist’ created to assess children’s progress in areas like behavior; social; motor and coordination; and language and communication (Appendix 5). The music teacher can identify the target behavior and skills in which they want to train the child, and rate the target behavior and skills over time to see progress.

The music teacher can decide when to assess the child's progress: weekly, biweekly or monthly. If parents are present, the music teacher might also want them to fill out the 'Target Behavior and Skills Checklist' monthly.

Conclusion

Music therapy is used to address physical, psychological, cognitive and social needs of children with special needs. The protocol developed for music therapy uses clinical and evidence-based music intervention to accomplish individualized goals for children with autism. 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, including among allied health professionals and special educators, a structured protocol was developed with effective activities to train autistic children. The music and instruments can be adapted according to the culture and music of the community or country.

Q & A Cards			Accomplished on		(Tick where applicable)
No.	Question	Answer	Month	Year	Checklist
1	How are you?	I am fine, thank you.			<input type="checkbox"/>
2	What is your name?	My name is _____.			<input type="checkbox"/>
3	How old are you?	I am ____ years old.			<input type="checkbox"/>
4	Where do you live?	I live at _____ (address).			<input type="checkbox"/>
5	What is your telephone number?	My telephone number is _____.			<input type="checkbox"/>
6	What is your mother's name?	My mother's name is _____.			<input type="checkbox"/>
7	What is your father's name?	My father's name is _____.			<input type="checkbox"/>
8	What is your sister's name?	My sister's name is _____.			<input type="checkbox"/>
9	What is your brother's name?	My brother's name is _____.			<input type="checkbox"/>
10	When is your birthday?	My birthday is on _____.			<input type="checkbox"/>
11	Where do you study?	I study at Sekolah Rendah _____.			<input type="checkbox"/>
12	What standard are you in?	I am in standard 6			<input type="checkbox"/>
13	What is your favorite color?	My favorite color is _____.			<input type="checkbox"/>
14	What are your hobbies?	My hobbies are _____.			<input type="checkbox"/>
15	What day is today?	Today is _____.			<input type="checkbox"/>
16	Can you tell me all the days in a week?	Monday ... Sunday			<input type="checkbox"/>
17	Can you tell me all the months in a year?	January ... December			<input type="checkbox"/>
18	Can you count 1 - 10 for me?	1 10			<input type="checkbox"/>
19	Can you recite all of the alphabet for me?	A Z			<input type="checkbox"/>
20	What time is it now?	The time is _____.			<input type="checkbox"/>
21	Where do you work?	I work at _____.			<input type="checkbox"/>
22	What is your boss' name?	My boss' name is _____.			<input type="checkbox"/>
23	What is the name of your class teacher?	My school teacher's name is _____.			<input type="checkbox"/>
24	What is my name?	Your name is _____.			<input type="checkbox"/>
25	Do you have a pet?	Yes I have / No I don't.			<input type="checkbox"/>
26	What pet is it?	Example: It's a dog.			<input type="checkbox"/>
27	What's its name?	Its name is Bingo.			<input type="checkbox"/>
28	How many brothers and sisters do you have?	I have ____ brothers & ____ sisters.			<input type="checkbox"/>
29	What is the name of your school?	My school name is _____.			<input type="checkbox"/>
30	What is the name of this Centre?	Lions REACH.			<input type="checkbox"/>
31	What is your father's occupation?	My father is a _____.			<input type="checkbox"/>
32	What is your mother's occupation?	My mother is a _____.			<input type="checkbox"/>
33	What do you like to eat?	I like to eat _____.			<input type="checkbox"/>
34	What do you like to drink?	I like to drink _____.			<input type="checkbox"/>
35	What is your favorite activity at the centre?	My favorite activity is _____.			<input type="checkbox"/>

APPENDIX 1: Music Q & A Card List
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36	How did you come to the Centre tonight?	I came here by _____.			<input type="checkbox"/>
37	Who brought you to the Centre tonight?	My _____ brought me here.			<input type="checkbox"/>
38	What time do you get up every day?	I get up at _____ every day.			<input type="checkbox"/>
39	What time do you go to bed every day?	I go to bed at _____ o'clock.			<input type="checkbox"/>
40	What is your favorite television program?	My favorite TV programme is _____.			<input type="checkbox"/>

Music Therapy Session: Question to ask children

APPENDIX 2: Name Tag Box



APPENDIX 3: Attendance Card and Attendance Box



CDMA

Set 1 (24minutes 16 seconds)				
	Music	Instrument	Action	Purpose
	none	none	Greeting time in the hoop.	Knowing your identity
1	Hello Song	Action song	Choose a partner. Shake hands and dance.	Social greeting
2	Warming Up!	Instruction & action	Stretching arms, rolling head all around, shrug shoulders, swim, flop arms, bend at waist and circle around, shake	Gross motor skills: arms/legs Learning verbs

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APPENDIX 4: Music Therapy Synopsis

APPENDIX 5: Target Behavior and Skills Assessment

			whole body and freeze.	Exercise
3	Body Tap	Music & action only	<p>First round (TOUCH body parts): head, shoulder, chest, elbows, palm, stomach, bottom, knees, ankles, toes.</p> <p>Second round (POINT to face parts): eyes, nose, ears, mouth, eyebrows, cheeks, chin, forehead, neck, hair.</p>	<p>Gross motor skills: using arms</p> <p>Learning the names of body parts</p> <p>Words: "touch" and "point".</p>
4	Just a Spoonful of Sugar	2 sticks	<p>First round (right hand): Hold 2 sticks up with both hands and get ready. Knock both sticks alternately on the floor. Knock right stick on floor. Knock left stick on floor. Knock both sticks on shoulder and then knees. Knock both sticks together in front. Knock both sticks together at the back/up while keeping back straight. Knock both sticks alternately on the floor.</p> <p>Second round: exactly same as above.</p>	<p>Gross motor skills: using arms</p> <p>Following the steady marching beat</p> <p>Keeping posture</p> <p>Direction: "right", "left", "front", "back"</p> <p>Words: "alternate", "together", "change", "shoulder", "knees".</p>
5	Dallas	1 bell	<p>First round (right hand): Shake the bells at wrist. Knock right wrist using left hand wrist. Alternately knock both knees start with "right" and then "left". Raise right hand "up" and then "down" a few times. Use left elbow to knock right hand wrist. Alternately knock both knees saying "right", "left". Raise right hand "up" and then "down".</p> <p>Second round (left hand): same as above. Only difference is when knocking the knees, start with "left" and then "right".</p>	<p>Gross motor skills: using arms, wrist shaking</p> <p>Direction: "left", "right", "up", "down"</p> <p>Words: "elbows", "wrist", "change"</p>
6	Cha-Cha	1 castanet	<p>First round (tap with right hand):</p> <p>Hold castanet in left hand. Using all 5 fingers to tap instrument and gradually releasing them one by one until only the pointing finger taps the instrument.</p> <p>Second round (tap with left hand): same as above.</p>	<p>Fine motor skills: fingers</p> <p>Balancing the castanet</p> <p>Listening skills (fast & slow rhythm)</p>
7	Counting up to 20	Singing	Just sing and tap knees.	<p>Learning to count up to 20</p> <p>Learning when to echo and when to sing along</p>
8	Oh we can play the big base drum	Singing	Pretending to play musical instruments.	Learning sounds
9	Sing A Rainbow	Singing	Hold up arms and wave gently while singing about the colors.	Learning colors

Name of Child: _____ Gender: _____ Age: _____

No. of Parent(s) Participating in the Programme: Mother Father Mother and
Father

Is Maid Participating in the Programme? Yes No

Is Sibling Participating in the Programme? Yes No

Diagnosis: Mild Autism Mild-Moderate Autism Moderate-Severe Autism Severe Autism

Features of Autism:

Mental Development: Mental: _____

Speech and Language: _____

Motor: _____

Social: _____

Self-help: _____

Academic Achievement (Last year's result): _____

Placement: Integration Programme

Normal Class: Standard _____ OR Secondary _____

Behavioral Problems:

AREAS OF ASSESSMENT: Behaviour	RATING (0-4)					Rating scale for behavior: 0 – not able to control self at all (with physical prompt) 1 – poor (self-control with gestural and physical prompt) 2 – average (self-control with verbal and gestural prompt) 3 – good (self-control with verbal prompt) 4 – very good (able to control self without prompting) N/A – Not applicable
	Date:	Date:	Date:	Date:	Date:	
I. Disruptive Behavior:						
(a) Restless (moving about)						
(b) Fidgety						
(c) Touch the child beside him/her						
(d) Hit the child beside him/her						
(e) Noisy (shouting or screaming)						
(f) Temper tantrum						
II. Non-Compliance:						
(a) Inattentiveness						
(b) Non-compliance						
(c) Space out						
(d) Freezing up body and not following						

AREAS OF ASSESSMENT: Social	RATING (0-4)					Rating scale for social: 0 – totally in his/her own world with physical prompt) 1 – poor (socialization with gestural and physical prompt) 2 – average (socialization with verbal and gestural prompt) 3 – good (socialization with verbal prompt) 4 – very good (able to socialize without prompting) N/A – Not applicable
	Date:	Date:	Date:	Date:	Date:	
(a) Maintain eye contact						
(b) Initiate greetings with friends						
(c) Initiate greetings with teacher/aunt/ uncle						
(d) Initiate to find own partner						
(e) Able to share /turn take						
(f) Willing to follow the music sequence						
(g) Able to show enjoyment in the music						

AREAS OF ASSESSMENT: Speech and Language	RATING (0-4)					Rating scale for expressive language: 0 – non-verbal
	Date:	Date:	Date:	Date:	Date:	
I. Expressive:						
(a) Able to imitate sounds and						

words						1 – able to speak in 3-5 words
(b) Able to sing accurately (pronunciation)						2 – able to speak in 5-7 words
(c) Able to sing along with lyrics on the Poster						3 – able to speak in full sentence with prompting
(d) Able to ask questions correctly						4 – able to speak in full sentence without prompting
(e) Able to answer questions properly						N/A - Not applicable
(f) Able to make simple requests						
(g) Able to make request in a proper sentence						
(h) Able to respond verbally at the appropriate time						
II. Receptive:						Rating scale for receptive language:
(a) Able to follow and carry out instructions given by teacher						0 – do not understand at all (with physical prompt)
(b) Able to read and understand instructions						1 – poor understanding (with gestural and physical prompt)
(c) Able to imitate the actions						2 – average understanding (with verbal and gestural prompt)
(d) Able to sing along and do the appropriate actions						3 – good understanding (repeat instruction twice)
(e) Able to understand questions asked and respond accordingly (verbally)						4 – able to answer / carry out instructions without prompting
(f) Able to understand questions asked and respond by matching appropriate answers from the prompt cards						N/A - Not applicable

AREAS OF ASSESSMENT: Motor & Coordination	RATING (0-4)					Rating scale for motor & coordination:
	Date:	Date:	Date:	Date:	Date:	
I. Gross Motor:						0 – not able to perform movements at all (with physical prompt) 1 – poor motor & coordination skills (with gestural and physical prompt) 2 – average motor & coordination skills (with verbal and gestural prompt) 3 – good motor & coordination skills (with verbal prompt) 4 – very good motor & coordination skills (able to perform movements without prompting) N/A – Not applicable
(a) Able to march						
(b) Able to hop						
(c) Able to clap						
(d) Able to skip						
(e) Able to jump						
(f) Able to knock objects / body parts						
(g) Able to shake objects / body parts						
II. Fine Motor:						
(a) Able to tap						
(b) Able to swing						
(c) Able to point						
(d) Able to twist						
III. Coordination:						
(a) Able to perform movements with alternate hands						
(b) Able to perform movements with alternate legs						
(c) Able to perform cross movements						
(d) Able to perform movements with one hand or one leg						
(e) Able to use equipment given						

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