

# Effects of Music In Autistic Children and their Behavior – Dr. T. MYTHILY Ph. D

## Introduction

Music Therapy is the unique application of music to enhance personal lives by creating positive changes in human behavior. It is an allied health profession utilizing music as a tool to encourage development in social/ emotional, cognitive/learning, and perceptual-motor areas. Music Therapy has a wide variety of functions with the exceptional child, adolescent and adult in medical, institutional and educational settings. Music is effective because it is a nonverbal form of communication, it is a natural reinforcer, it is immediate helioin time and provides motivation for practicing nonmusical skills. Most importantly, it is a successful medium because almost everyone responds positively to at least some kind of music.

Music Therapy is particularly useful with autistic children owing in part to the nonverbal, non threatening nature of the medium. Parallel music activities are designed to support the objectives of the child as observed by the therapist or as indicated by a parent, teacher or other professional. A music therapist might observe, for instance, the child's need to socially interact with others. Musical games like passing a ball back and forth to music or playing sticks and cymbals with another person might be used to foster this interaction. Eye contact might be encouraged with imitative clapping games near the eyes or with activities which focus attention on an instrument played near the face. Preferred music may be used contingently for a wide variety of cooperative social behaviors like sitting in a chair or staying with a group of other children in a circle. Music Therapy is particularly effective in the development and remediation of speech. The severe deficit in communication observed among autistic children includes expressive speech which may be nonexistent or impersonal. Speech can range from complete mutes to grunts, cries, explosive shrieks, guttural sounds, and humming. There may be musically intoned vocalizations with some consonant-vowel combinations, a sophisticated babbling interspersed with vaguely recognizable word-like sounds, or a seemingly foreign sounding jargon. Higher level autistic speech may involve echolalia, delayed echolalia or pronominal reversal, while some children may progress to appropriate phrases, sentences, and longer sentences with non expressive or monotonic speech. Since autistic children are often mainstreamed into music classes in the public schools, a music teacher may experience the rewards of having an autistic child involved in music activities while assisting with language.

Since autistic children sometimes sing when they may not speak, music therapists and music educators can work systematically on speech through vocal music activities. In the music classroom, songs with simple words, repetitive phrases, and even repetitive nonsense syllables can assist the autistic child's language. Meaningful word phrases and songs presented with visual and tactile cues can facilitate this process even further.

Music Therapy is of two types: One is passive form of music therapy the other one is Active form of music Therapy . With regard to Autistic children, the active form of application may be of good help in making the child repeat the required responses at a given time. The reinforcement will be more

effective if it more frequent , from the part of the care giver. The learnt material through this method, will become spontaneous after some time. In this present study, the active form of music therapy has been tried to effect a positive change in the communicative ability of Autistic children.

Note: Education for all DD children Act (1977) narrates, and recognizes the use of art as a viable teaching tool, effective way not of teaching special skills to children but also reaching youngsters who had otherwise been unteachable Music Therapy assessment is reimbursable and may be covered through insurance also. The families with Autistic children may be provided with help and support from Government and Charities , in the form of allowances like, Disability Living Allowance to cover the extra expenses involved in caring the Autistic Children.

### **Aim**

To find out the effects of music exposure in the form of training and listening in Autistic children's expressive behavior and speech and communication.

### **Sample Selection**

Fourteen children in the age group of four to eight years have been selected for the study. The sample is Homogenous in many sense, that all of them diagnosed as autistic by thirty months of age, and the treatment started right from 30 month onwards. Four girls and 10 boys comprised the group.

### **Methodology & Justification**

Every activity to be learned and the necessary expressions required to elicit responses from autistic children ought to be tried through music with lyrics, sung by familiar voice, probably mother. The Applied Behavioral Analysis with a Cognitive Neuro Psychologist in the form of one to one assessment will take the child in the right road toward improvement.

This form of giving music background is the active form of music therapy sometimes it is participative too, since the responses narrated are meant to perform.

With regard to giving training to the child in the daily routines, every activity pertaining to the actions needed and the responses for the same , may be recorded by a familiar person to the child or by his / her mother, in an audio cassette. This can be played in the room or in the area the child is resting ,playing and moving around . The constant background with routines, being reaching the ear of these children , those words and sentences will be easily accessible by children. The repeating of the sentences or expressing the words correctly and aptly will be more frequent after few weeks of exposure, in some occasions it may take few months also. On account of this exposure the conversing ability or rather expression of needs of the child will be attained after a time frame. By this pattern of exposure the learned activities and actions in children ought to be reinforced to a perfection.

Since every effort ought to be put forth to bring change in the behavior of these autistic children, the systematic presentation of activities- audio cassette- to be heard in the background thrice or four times daily say at every four hours or once in five hours . The phrases which are coming slowly in the back ground will get register in the mind of the children and will repeat spontaneously at a later point. Sometimes the repeat will concur with the situation and many times it many not. Any how the child learn to repeat the heard words by training we can reinforce correctly and aptly to the needed actions.

In this point of development, there arise a valid question, why not these activities can be taught directly to children? Teaching these autistic children in a one to one session may not yield the needed results. Why in the sense, the attention span, observing the actions of others, and connecting the ideas will not be possible with autistic children, because of the absence of mirror neurons. But these actions if presented in a back ground it may get registered at one time or at another and the right response may be expressed at every one's surprise.

Hence, justification of selection of audio through causal listening and periodical exposure, involuntary presentation of actions in a simple manner will yield the expected results and do good to the autistic children on the whole.

Then presentation of activities related audio cassette to each child in a session .In this session also the children expressive behavior were the target. From all these session and segments the results were started arriving from the fourth month onwards.

The responses were collected and presented in the form of figures and graph to assess the child's progress during the period of training.

## **Discussion**

The regular exposure to music helped children to attain an impressive way of responding to queries, many children developed it as a habit, that is , to reply playfully. Since the response level of Autistic children was very less and the weekly progress of every child was very much minimal, the responses were rated for every fourth week. Over all the children in each age group performed or expressed the required response at four weeks of exposure. In between the response eliciting music, to reduce level of the repetitive actions of children were also included as a variation . This setup was also worked to the expectations. On account of this exposure, the exploring behavior of children were also emerged to a certain points. The main focus of making the child communicative has also seen success at the end of study. Since the results available from this study are progressive in nature it has been suggested to the parents of autistic children to continue the procedure after the study period too.

The present study also focused on the aspects of social developments and communicative ability in autistic children. The social interactive dialogues were invariably correctly registered in a response – reply pattern. Almost every child responded correctly to the stimuli and expressed aptly to the questions. Many a time the responses expressed by children, were repetitive and spontaneous too, to everybody's surprise!. Since the social interactive responses were presented in a song sequence pattern, the tunes were also hummed by children when there was no play procedure was taking place. This attainment in autistic children was a fabulous one and the progress was in the positive trend. The social interactive responses related to daily core actions were picked up easily by children.

In the group of 14 children, the communicative ability was picked up by eighth or tenth week of exposure and training. With one child exception other children were able to repeat / reply the responses at ease. The one boy was able to repeat /reply the responses by 14th week of training. This result reveals, that, there exist individual differences.

The continued exposure to musical stimuli and training parted to children (weekly thrice for 52 weeks) has done enormous good to these children. Almost every child in the group has picked up the response pattern between twelfth and sixteenth week and progressed in a positive trend of development by replying to more responses. By the end of the study children were able to reply around 25 words.

The basic contention of learning to these children is that the once learned actions and responses which were reinforced by repetition should be performed by children regularly.

The learned actions if not performed for three or four days, may likely to forget and the relearning will take again the same number of days. Since these children learn everything as- minus mirror neurons, the caregivers ought to be more careful in implementing the learning. With every small events and activities monitored in playful manner these children acquire the basic communicative skills easily. With necessary communication the social interaction with immediate family members and in the group in which the child is mingling will become possible. This leads to the expression of behavior and interests if any may also be expressed by the child.

## **Conclusions**

- With regard to this study, the Active form of music has done enormous good to Autistic children.
- The Communicative ability of Autistic children has been improved over the weeks of exposure.
- The Social interaction in the form of expressive behavior were drastically improved toward positive direction.
- Each Autistic child has shown improvement in their activities, both at individual level and also in the group .
- The one year/ 52 weeks of exposure to musical stimuli has become a part of the child in every aspect.
- There are individual differences in Autistic children in response and repetitive of expressions, with regard to this study.
- There is no sex difference in the response and reply with regard to this study.
- The communication levels of each child has been improved over the weeks.

- The pattern of communication has been learnt by children with ease, with regard to this study.
- The study may be utilized in larger population of Autistic children and the benefit may be reaped to every child who is in need of the same.



