

SOCIAL SKILLS OF PERSONS WITH AUTISM SPECTRUM DISORDER- AN INTERVENTIONAL STUDY

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Abstract

Autism is a disorder that includes differences and/or challenges in social communication skills, fine and gross motor skills, speech, and intellectual ability. Autism is characterized by persistent deficits in social communication and social interaction across multiple contexts, including deficits in social reciprocity, nonverbal communicative behaviours used for social interaction, and skills in developing, maintaining, and understanding relationships. This paper aims to study the effectiveness of Music Therapy in enhancing the Social Skills on Children with Autism. The sample consisted of six children, each having mild level of Autism and the Age ranging from 8 to 12 years were selected for improving social skills. The sample was taken from Child Guidance Clinic (CGC), Department of Paediatrics, SVRR Government General Hospital, Tirupati. Both therapist and parent undergone forty 45minutes sessions of Social Skills training through Musical Activities for three months. Before and after intervention, Autism Social Skills Profile (ASSP) scale was administered to both of parents towards children with Autism which included two components of Eye-contact, Recognition of Facial Expression. The findings from Means, SDs and the paired t test revealed that the effect of intervention in improving Social Skills and in two the Social Skill areas or components were statistically significant. There is a significant improvement in Social skills among children with Autism (Music Intervention Package). The findings of the study further support the fact that Music Activity is an effective way of improving Social Skills among children with Autism.

Keywords: Autism, Social Skills, Music Therapy

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Introduction

Disability is an umbrella term covering impairments, activity limitation and participation restriction. Impairment is the problem in body function or structure; and an activity limitation is a difficulty encountered by an individual in executing a task or action; while a participation restriction is a problem experienced by an individual in involvement in life situation. Thus disability is a complex phenomenon, reflecting an interaction between features of person's body and features of the society in which he or she lives. Disability may be present from birth, or occur during a person's life time. Disability affects the child, not only the child's life but also the life of the family member. Other family members of the family, such as relatives, friends and even neighbours of a child with disability may experience stress to a varying extent.

Social skills are behaviours that promote positive interaction with others and the environment. Some of these skills include showing empathy, participation in group activities, generosity and helpfulness, communicating with others, negotiating, and problem solving. Teaching social skills can incorporate a number of techniques, including direct instruction, learning from peers, prevention of problem behaviours, and children's books. Many social behaviours are better learned among peers (Ladd, 2005), so teachers of young children are in a unique position to promote social learning in their classrooms.

Some authorities contend that for teen years (8 to 12 years) children with disabilities, social skills development should be the central goal of early childhood programs. In addition to children with identified developmental problems, there are often other children in classrooms who lack social skills or demonstrate problem behaviour, although they do not have an identified disability.

Music forms part of our lives, and provides pleasure and satisfaction. At the same time, this research suggests that learning music may also carry side benefits. One of these is the potential for improved interpersonal communication, through the key factor shared by both activities: Listening, Music offers boundless opportunity for developing listening skills, but applying this learning outside of music does not occur automatically. The improvement of interpersonal communication through music is dependent upon making conscious connections between the listening skills developed in a musical context, and the application

of these skills in other contexts. Musical skills developed in a rich musical environment, placing emphasis on the use of voice in singing and speech, and providing a broad range of musical activities have shown an improvement in the interpersonal communication of preschool children from a deprived neighbourhood. (EVA BRAND AND ORA BAR-GIL)

Autism

The term “autism” is derived from two Greek words “autos” meaning self and “ismos” meaning state of being or action. Thus, roughly it means state of being absorbed by one’s self or self-contained. The term “autism” was first used by Swiss psychiatrist **Eugen Bleuler** around 1911 to refer some schizophrenic patients were self-absorbed.

Autism was first described as a distinct disorder during the 1930's. The definition, however, has changed radically over the years. Perhaps most significantly, Asperger syndrome was added to the autism spectrum in 1994.

Later in 1943 an American psychiatrist Leo Kanner found some common traits amongst a group of 11 children. In all of them he found the unusual behaviour and insistence on sameness, social isolation, impairment in language development leading confusion of personal pronouns echolalia. He called these children autistic.

In 1944 Hans Asperger studied a group of boys and found impairment in social interaction, repetitive behaviour pattern but good cognitive abilities and linguistic skills. This condition is now known as Asperger’s syndrome. In 1964 an American psychologist Bernard Rimland said autism is a biological disorder. In 1980 autism was categorized as a developmental disorder separate from schizophrenia in the diagnostic and statistical manual of mental disorders (DSM-III). In 1992 Asperger’s syndrome added to DSM-IV. In 2013 the separate diagnostic labels of autistic disorder, Rett’s disorder, Childhood Disintegrative disorders, Asperger’s disorders and Pervasive Developmental Disorders (PDD) not otherwise specified were replaced by one umbrella term Autism Spectrum Disorder (ASD) according to DSM-5.

Today, according to the DSM-5 (Diagnostic Manual Version 5) there is only one diagnostic category for people with autism: Autism Spectrum Disorder (ASD).

Meaning of Autism

Autism is a disorder that includes differences and/or challenges in social communication skills, fine and gross motor skills, speech, and intellectual ability. People with autism also have atypical responses to sensory input, like unusual sensitivity to light, sound, smell, taste, and/or sensory cravings. Other common symptoms include “stims” (hand flapping, toe walking, rocking), a need for sameness and repetition, anxiety, and in some cases amazing “savant” abilities in certain areas (often music and math). Since autism is a spectrum disorder, it is possible to be mildly, moderately, or severely autistic.

Autism spectrum disorder is characterized by persistent deficits in social communication and social interaction across multiple contexts, including deficits in social reciprocity, nonverbal communicative behaviours used for social interaction, and skills in developing, maintaining, and understanding relationships. In addition to the social communication deficits, the diagnosis of autism spectrum disorder requires the presence of restricted, repetitive patterns of behaviours, interests, or activities. Because symptoms change with development and may be masked by compensatory mechanisms, the diagnostic criteria may be met based on historical information, although the current presentation must cause significant impairment. (DSM- 5)

Autism is a disease of early onset that has been shown to have a strong genetic basis. Nevertheless, the role of the environment in affecting the onset of autism is still striking, as demonstrated by the quite dramatic variability in the symptom presentations and ultimate adaptations of monozygotic twins. Autistic children appear normal at birth. During their first months of life, they begin to develop severe deficits in their capacity to form relationships and communicate with others. Once fully expressed, autism has a devastating impact on the subsequent development of afflicted children. What is perhaps most striking is the inevitability of early expression as there are no examples of onset later in childhood or adolescence.

Diagnostic Criteria For Autism

A. Persistent deficits in social communication and social interaction across multiple contexts, as manifested by the following, currently or by history.

1. Deficits in social-emotional reciprocity, ranging, for example, from abnormal social approach and failure of normal back-and-forth conversation; to reduced

sharing of interests, emotions, or affect; to failure to initiate or respond to social interactions. 2. Deficits in nonverbal communicative behaviours used for social interaction, ranging, for example, from poorly integrated verbal and nonverbal communication; to abnormalities in eye contact and body language or deficits in understanding and use of gestures: to a total lack of facial expressions and nonverbal communication.

3. Deficits in developing, maintaining, and understanding relationships, ranging, for example, from difficulties adjusting behaviour to suit various social contexts; to difficulties in sharing imaginative play or in making friends; to absence of interest in peers.

B. Restricted, repetitive patterns of behaviour, interests, or activities, as manifested by at least two of the following, currently or by history.

1. Stereotyped or repetitive motor movements, use of objects, or speech (e.g., simple motor stereotypies, lining up toys or flipping objects, echolalia, idiosyncratic phrases).
2. Insistence on sameness, inflexible adherence to routines, or ritualized patterns of verbal or nonverbal behaviour (e.g., extreme distress at small changes, difficulties with transitions, rigid thinking patterns, greeting rituals, need to take same route or eat same food every day)
3. Highly restricted, fixated interests that are abnormal in intensity or focus (e.g., strong attachment to or preoccupation with unusual objects, excessively circumscribed or perseverative interests).
4. Hyper- or hypo reactivity to sensory input or unusual interest in sensory aspects of the environment (e.g., apparent indifference to pain/temperature, adverse response to specific sounds or textures, excessive smelling or touching of objects, visual fascination with lights or movement).

C. Symptoms must be present in the early developmental period (but may not become fully manifest until social demands exceed limited capacities, or may be masked by learned strategies in later life).

D. Symptoms cause clinically significant impairment in social, occupational, or other important areas of current functioning.

E. These disturbances are not better explained by intellectual disability (intellectual developmental disorder) or global developmental delay. Intellectual disability and autism

spectrum disorder frequently co-occur; to make comorbid diagnoses of autism spectrum disorder and intellectual disability, social communication should be below that expected for general developmental level.

The music was used as an intervention both therapeutically and within the classroom in mainstream and special education, and asks whether it has further potential to enhance learning for children with ASD. It includes the recent literature regarding the use of music with children with ASD. Interventions considered address difficulties and differences within the areas of social interaction, communication, understanding and imagination.

The concept of musical ‘special interest’ of children with ASD being harnessed to enhance learning was also considered. (Australian Catholic University-Nov, 2011).

Previous reviews of literatures, it can be seen that Poor Social Skills (Eye-contact and Recognition of Facial expression) leads to less Socialization. That is very less communication to others in the group or society. But with the help of Musical Activities (Clapping, Rhymes, Video Modelling and Play with Mouth-Organ, Drums & Spinning Drum) Children with mild Autism can improve in Social Skills.

Methodology

Methodology is a way of systematically solving the research problem. It includes sample selection, sample size, development of tool, treatment condition, settings and techniques used for statistical analysis of the data.

Selection Of The Sample

The participants of this study were 6 Children with mild Autism from Child Guidance Clinic (CGC), Department of Paediatrics, SVRR Government General Hospital, Tirupati.

Sample Size

The total sample size is 6

- 6 males
- Age : 8-12 years

Sample Characteristics:

Sample characteristics of the total sample of six, the details of level of mild Autism and total sample size are given in table: 1

The technique of purposive sampling, characterized by used of judgement and a deliberate effort to obtain representative samples.

Criteria For Selection Of The Study

Inclusion Criteria

- Age Range between 8-12 years Children with mild Autism
- Children who are follow to Child Guidance Clinic(CGC), Department of Paediatrics, SVRR Government General Hospital, Tirupati.

Exclusion Criteria

- Children with Autism other associated conditions.
- Persons with who have severe behavioural issues.
- Individuals with intellectual disability having visual and Hearing impairment.

TOOLS USED IN THE STUDY

Present study deals with assessment of two aspects of psychology i.e., Autism and Social Skills.

- Indian Scale for Assessment of Autism (ISAA) ➤
Autism Social Skills Profile (ASSP)

Procedure

MUSIC ACTIVITY PACKAGE

In the Music Activity Program (MAP), Musical Activities will be given intervention to the Children with Autism the researcher has developed Social Skills through the Musical Activities of

- Clapping,
- Rhymes,

➤ Video Modelling

Before giving the intervention the Musical Activities package was validated from experts who are working in the field of Mild Autism.

1. Clapping :

- ❖ Purpose of the activity: To improve Eye-contact and to strike the palms of (one's hands) against one another resoundingly, and usually repeatedly, especially to express approval. To strike (a person) lightly with an open hand, in greeting and encouragement, etc.
- ❖ Materials Required: To clap the hands by the researcher individually or with child.
- ❖ Procedure: Students will be sitting in front of the researcher asked to giving the alertness for the good communication and to involving the musical activity for few minutes.



- ❖ Difficulty level: Some subjects will get uneasy with this clapping sound.
- ❖ Apply : Group/Individual

2. Rhymes: One of two or more words or phrases that end in the same sounds. To end with the same sound.

- ❖ Purpose of the activity: Purpose to increase the Facial expressions, Turn Taking and Responds to the greetings of the researcher.

- ❖ **Materials Required:** Using the different types of musical instruments, Headset and speakers.
- ❖ **Procedure :** Subjects sit in front of the researcher and Play the Rhymes through Musical instruments for few minutes and repeats the same things 3 to 5 times according to their interest and subjects also repeats that rhyming words in that same time usually.



Smile Smile Smile

*Smile Smile Smile When I Feel Happy
Cry Cry Cry when I Feel Sad
Fear Fear Fear when I Feel shock*



One Two Three Four

*"One Two Three Four Five
Once I caught a Fish Alive
Six Seven Eight Nine Ten
Then I Let It Go Again"*



Humpty

Dumpty

*Humpty Dumpty Sat on a Wall
Humpty Dumpty had a Great Fall*



- ❖ **Difficulty level:** Some Rhyming words were little bit hard to pronounce to subjects and arranging the musical setup to the Autistic children.

- ❖ **Apply :** Group/Individual

3. Video Modelling: Video Modelling is a Visual teaching method that occurs by watching a video of someone modelling a targeted skill and then imitating the skill watched. Video Modelling is a simple and effective teaching tool that motivates children to learn through a fun and enticing visual medium. Video Modelling is used to model multiple social skills at once, as they are in real life.

Example: A game of building blocks teaches:

- Turn Taking
- Eye-contact
- Play skills
- Fun

- Balancing skills

Example: A colouring scene

- Children are colouring
- Asking for Crayons
- Interacting and Talking
 - ❖ Purpose of the activity: Making Eye-contact, listening, Paying attention, Reacting appropriately to situations, Communicating verbally and non-verbally, Interpreting social cues, Reacting to social cues and Understanding the thoughts of others.
 - ❖ Materials Required: Using computer system, Headset, Speakers and Some other musical instruments.
 - ❖ Procedure: Subjects sit in front of the researcher and Play the Videos through Musical instruments for few minutes and repeats the same things 3 to 5 times according to their interest and subjects also repeats and imitates of the model.



- ❖ Difficulty level: Some subjects may addict to that videos and arranging the musical setup to the Autistic children.
- ❖ Apply : Group/Individual

Statistical Analysis

- ▶ The data was analyzed by 20th version of Statistical Package for Social Sciences (SPSS). The Statistical technique used to analyze the data was paired t-test to analyze Mean, Standard Deviation (SD) to hypotheses.

Results and Discussion

Table -1 Shows Mean, Standard Deviation and t-value of Eye-contact domain on pre and post test.

	N	Pre score	Post score	t-value
Mean	6	19.50	22.83	2.42*
SD		2.881	4.021	

Hypothesis 1: There would be significance difference in Eye-contact among children with autism post intervention (Music therapy intervention package).

Table -2 Shows Mean, Standard Deviation and t-value of Recognition of facial expression domain scores on pre and post test.

	N	Pre score	Post score	t-value
Mean	6	9.00	11.30	2.30*
SD		1.42	2.88	

Hypothesis 2: There would be significance difference between pre and post in Recognition of Facial Expression among children with autism (Music therapy intervention package).

Conclusion

The table-1 shows the pre and post intervention mean scores on the Eye-contact domain. The pre intervention means 19.50 and SD is 2.881 and the post mean is 22.83 and SD is 4.021 and t-value is 2.42, it is significant at 0.05 level. It is evident that there is significant improvement from pre-test to post test on the Domain of Eye-contact. Hence, the hypothesis 1 is accepted. The table-2 shows the pre and post intervention mean scores and t-value for comparing the pre and post intervention mean scores on the Recognition of Facial Expression

domain. The pre intervention means 9.00 and SD is 1.42 and the post mean is 11.30 and SD is 2.88 and t-value is 2.03, it is significant at 0.05 level. It is evident that there is significant improvement from pre-test to post test on the Domain of Recognition of Facial Expression . Hence, the hypothesis-2 is accepted.

Implications

Based on the outcomes, Techniques of Music Therapy could be used to improve the social skills, like eye-contact and Recognition of facial expression in children with ASD. If provided meaning activity through music, it will help children with Autism to adapt effectively with the environment. This will help the rehabilitation professionals to understand the efficacy of music activity as an intervention to deal with children having Autism.

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