

# Effectiveness of Active and Passive Participation in Music Therapy on Social Emotional Skills of ADHD Children

M. Mahendran<sup>1</sup>, Dr. T. Jagadeesan Mot (Psy)<sup>2</sup>

<sup>1</sup>J.K.K.M.M.R.F. College of Occupational Therapy, Ethirnedu, Komarapalayam. Namakkal District, Tamilnadu – 638 183, India

**Abstract:** ***Aim:** To find the effect of active and passive participation in music therapy on social emotional skills of ADHD children (6-12years). **Objectives:** To screen ADHD children by using Vanderbilt ADHD diagnostic teacher rating scale. To assess social and emotional skills of ADHD children. To compare the emotional and behavioural skills between active passive participation groups. **Methodology:** Totally 30 subjects (15 in experimental group and 15 in control group) of age group of 6 to 12 years participated in current study. TEACHER'S REPORT FORM AGES (6-18) is used for evaluation. TEACHER REPORT FORM is used for ADHD to assess academic competence, adaptive functioning, inattention hyperactivity-impulsivity, social problems, and thought problems, anxious and depressed. **Results:** Significant reducing in social emotional skills problems, with regard to active and passive music therapy in occupational therapy. **Conclusion:** Active and passive participation in music therapy has significant effect in reducing social and emotional problems in ADHD pupil.*

**Keywords:** ADHD, social emotional skills, active and passive Music therapy

**Place of Study:** Occupational Therapy Foundation, Erode

**Period of Study:** March 2016 to June2016

## 1. Introduction

The increasing numbers of adolescents with an emotional disturbance and or behaviour disorder in schools indicates that there is a need to develop more specific programmes and approaches that work with affecting self-regulation, communication and social/behavioural dysfunction within this population group. Behaviour management techniques, such as positive reinforcement, token economy systems, contracting and time-out are commonly used in programmes for this population group with success. In addition many supportive therapies involving music and the visual arts are beginning to be utilised to try and add to the treatment and success of such interventions.

Music therapy studies indicate that using music as an intervention can be of great value for those who have difficulties with self-control, thinking, responding appropriately and social interaction (Stratton, 1989; Friedlander, 1994). Therapists and those involved in music education, have a deep belief that all students can be helped to learn to enjoy and to become involved in music (Walker, 1996). Montello and Coons (1998) supports this theory. They found that students who were experiencing severe obstacles in forming relationships with others and their environment began to show evidence of improved self-worth and self-esteem as a result of making music Hanschmaker (1980) summarizes succinctly what music can do for young children and which could be generalized to all school-aged children.

He says that music has the ability to “facilitate language acquisition, reading readiness, and general intellectual development...to enhance creativity; and to promote social development, personality adjustment, and self-worth.”

In 1975, Juliet Alvin conducted a study with adolescent boys diagnosed with a behaviour disorder. She found that when

preparing for a concert, the boys who were usually aggressive showed interest and enthusiasm towards music. She found that music was able to initiate conversation and help create a state of mind in which the boys were ready to reveal their problems.

Wasserman (1972) saw music therapy as a tool to improve emotional responsiveness and recently Layman et al. (2002) indicated that it helps with problems of impulsivity and self-regulation. Music therapy can also help with assisting internal organisation and coordination of the mind and body (Gaston, 1968; Montello, 1996). Sandra Wilson (1991) sees music therapy as an “adjunct” to education where children with “learning disabilities resulting from physical, psychological or emotional problems” can develop socially, emotionally, cognitively and physically. Music therapy works with the relationship between learning and music by reflecting an awareness of self-perception, allowing subsequent growth and facilitating intrinsic change at many levels (Wilson, 1991). Disclosure and awareness of self has been precipitated through the music as the relationship with music, therapist and self has developed. Song writing, according to Goldstein (1990) provides a successful, pleasant experience and that a great deal of additional information about the participant can be gained through such techniques in addition to that, this study in also intended to find effects as well as to compare the effect between active and passive participation groups.

## 2. Aim & Objectives

### Aim

- To find the effect of active and passive participation in music therapy on social emotional skills of ADHD children.

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### Objectives

- To screen ADHD children by using Vanderbilt ADHD diagnostic teacher rating scale.
- To assess social and emotional skills of ADHD children.
- To compare the emotional and behavioural between active and passive participation groups.

### 3. Review of Literature

#### **Anne G. fishes, Elizebeth A Murray, Anita C. Bunday et.al., (2008)**

The objective of the study is the “Therapeutic use of music in occupational therapy “music is a modality present in occupational therapy. This paper consider my read of possibilities for actioners considering using music, providing a resources research within and outside the field. The potential effect of music the areas of pain/discomfort, movement, emotion, meaning/motivation, cognition, self expression/communication, relationship/ groups are discussed in items of enhancing communication

#### **Montello and Edgar E. Coons et.al., (1998)**

They conducted a study on “Effects of active versus passive group music therapy on preadolescents with emotional, learning and behavioural disorder” in the year of 1998.it was hypothesized that preadolescents who participated in active music therapy would more significantly improve target behaviour’s than those involved in passive music therapy Achenbach’s teacher report form (TRF) was used to confirm changes among subjects in attention, motivation, and hostility as rated by home room teacher. Twelve music therapy sessions were conducted over a 4-month period with three different groups of subjects (n=16),with two groups participating in active music therapy and the other receiving passive music therapy .Improved significantly after receiving both music therapy interventions.

#### **Hanschumaker (1980)**

He (1980) summarizes succinctly what music can do for young children and which could be generalized to all school-aged children. He says that music has the ability to “facilitate language acquisition, reading readiness, and general intellectual development .to enhance creativity; and to promote social development, personality adjustment, and self-worth.” If the use of music with children can achieve these things then future work with adolescents with a BD/ED may have similar outcomes.

#### **Juliet Alvin (1975)**

They had conducted a study on “Creating order out of chaos; Music therapy with adolescent boys diagnosed with a behaviour Disorder and/or emotional disorder” in the year of 1975.The study is made of 110 BD/ED Adolescents sample include both male and females subjects out of which 55 were given music therapy. From this study it concluded that music therapy was effective tool in bringing out problems of impulsivity and self regulation Changes.

#### **J. Rick son (2006)**

They conducted a study on “Instructional and Improvisational models of music therapy with adolescents who have attention deficit hyperactivity disorder (ADHD): A

Comparison of the Effects on motor impulse” in the year of 2006.The study made of 26 ADHD Adolescents sample male subjects as measured by a synchronised tapping task(STT) Restless-impulsive(R-I) and hyperactive-impulsive( H-I) subscales. From this study can be concluded that both music therapy treatment groups significantly improved accuracy on the STT.

### 4. Methodology

#### **Study Design**

The study is done with two group of pre-test and post-test of quasi experimental design (Pre-Post Experimental Study).

Experimental group=pre test (active and passive music therapy+ interaction) post test.

Control group = pre test (interaction) post test.

#### **Sample Size**

Total numbers of consecutive samples of 30 subjects have taken in this study. The subjects were divided into two groups as experimental and control group. The control group consist of 15 subjects, and experimental group consist of 15 subjects.

#### **Sampling Technique**

Convenient sampling technique was adopted.

#### **Study Place**

Occupational therapy foundation, Erode-638 001.

#### **Duration of Study**

Duration of the study is 4 months (March 2016 to June2016).

#### **Selection Criteria**

##### **Inclusion Criteria**

- Participants were children with ADHD between age 6 to12 yrs.
- Children with social emotional skills problems.
- Both males and females.

##### **Exclusion Criteria**

- Age should not be more than 12 years or less than 6 years.
- Children with neurologic problems.
- Retts, Asperger syndrome, Mental retardation and other associated conditions are excluded.

#### **Variables**

##### **Independent Variables**

Music therapy

##### **Dependant Variables**

Social emotional skills of ADHD.

##### **Measurement Tools / Material Required**

The tool used for the study is teacher report form on social emotional skill of ADHD.

##### **Description of the Instrument**

The 2001 Teacher’s Report Form (TRF) is a teacher-report measure that assesses problem behavior and can identify 8

syndromes. It also assesses academic performance and adaptive functioning. One or more teachers, or other school personnel, who have known the child in the school setting for more than 2 months, can complete the measure independently. The TRF is a parallel form to the Child Behavior Checklist (CBCL), completed by the caretaker, and the Youth Self-Report (YSR), completed by youths. It is designed for use in conjunction with these measures to give an overall understanding of the child's functioning in multiple environments. Cross-informant reports are available. The rating scale consists of 113 items covering the following areas. The scale consists of 113 items, to be judged as

- General symptomatology,(child )
- Eternizing symptoms,(child )
- Academic function /achievement,( child )
- Mood/anxiety symptoms(child )
- Internalizing (child)
- Inattention ,hyper activity-impulsivity
- Adaptive functioning
- Social problems ,thought problems
- Anxious/depressed
- Academic competence

- 1) 3-point Likers-type scale: 0=Not True, 1=somewhat or Sometimes True, and 2=Very True or Often True
- 2) Fill-in-the-blank questions, General assessment, Questionnaire, Teacher/daycare provider.

## 5. Procedure

A total of 30 subjects were taken in this study. The subjects were selected from the age group between 6to 12 years already diagnosed as ADHD by a psychologist.

The all 30 subjects had social or emotional problems. The subjects are divided in to two groups; a control group and an experimental group. Control group consist of 15 subjects, were taken from Erode occupational therapy foundation and the experimental group also consist of 15 subjects, were taken from occupational therapy foundation. The social emotional skill was quantified by Teacher report form on social emotional skill of ADHD children. The control group receive interaction only and the experimental group receive active and passive music therapy with hand movements /action. The therapy was given for 2 month. In which it was extended up to 30-45 minutes duration in five day in a week.

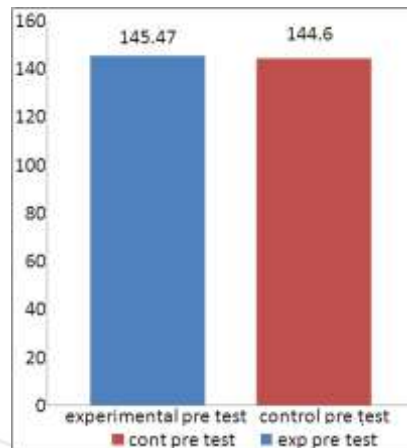
Total 25 treatment sessions were given to the patient in both control and experimental group. The pre data were collected in both groups at entry level with teacher report form on social emotional skill of ADHD children. Post data were collected after the treatment with teacher report form for social emotional skill.

### Data Analysis & Interpretation

**Table 1:** Comparison of social emotional skill in pre test between control and experimental group

Sl. No.	Test	Mean	M.D	S.D	't' value	'p' Value
1	Pre test	145.47	001.13	10.84	0.2410	0.8113
2	Post test	144.60		8.75		

From table-I shows that Comparison of social emotional skill in pretest between control and experimental group score mean values 145.47;144.60 and 't' values 0.2410, The two-tailed 'p' value equals 0.8113, by conventional criteria, This difference is considered to be not statistically significant.

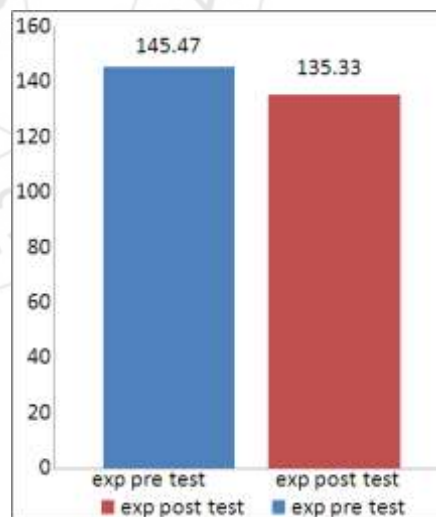


**Graph - I**

**Table 2:** Comparison of social emotional skill pre and post test experimental group

Sl. No.	Test	Mean	M.D	S.D	't' value	'p'Value
1	Pre test	145.47	10.14	10.84	12.4226	0.001
2	Post test	135.33		10.23		

From table-II shows that Comparison of social emotional skill between pre and posttest experimental group score mean values 145.47;135.33 and 't' values 12.4226, The two-tailed 'p' value equals 0.001 by conventional criteria, This difference is considered to be extremely statistically significant.



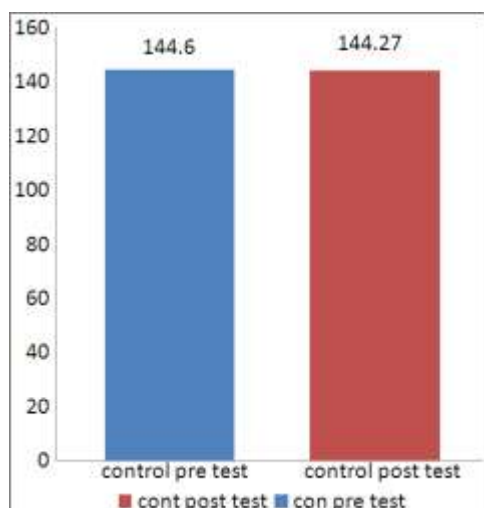
**Graph - II**

**Table III:** Comparison of social emotional skill between pre and post test control group

Sl. No.	Test	Mean	M.D	S.D	't' value	'p'Value
1	Pre test	144.60	0.33	8.75	1.7838	0.0961
2	Post test	144.27		8.46		

From table-III shows that Comparison of social emotional skill between pre and posttest control group score mean values 144.60;144.27 and 't' values 1.7838, The two-tailed

'p' value equals 0.0961, by conventional criteria, This difference is considered to be not quite statistically not significant.

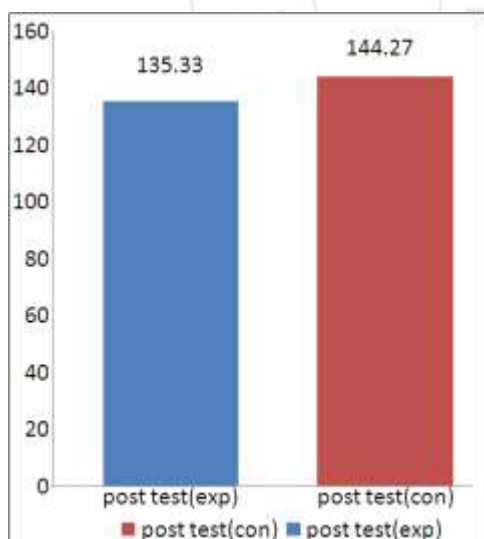


**Graph-III**

**Table-IV:** Comparison of social emotional skill between post test of both control and experimental group

Sl. No.	Test	Mean	M.D	S.D	't' value	'p'Value
1	Pretest (exp)	135.33	009.06	10.23	2.6057	0.0145
2	Posttest (con)	144.27		8.46		

From table-II shows that Comparison of social emotional skill between posttest of both control and experimental group score mean values 135.33;144.27 and 't' values 2.6057, The two-tailed 'p' value equals 0.0145 ,by conventional criteria, this difference is considered to be statistically significant.



**Graph-IV**

## 6. Discussion

The purpose of the study is to determine the effectiveness of active and passive participation in music therapy on social emotional skills of ADHD children.

Teacher's report form for is the pre-test and post-test measurement tool. This scale is used to evaluate the level of social emotional skills among ADHD children.

Initially ADHD children were selected based on the inclusion criteria were assessed using the teacher report form to get the pre-test values. Active and passive music therapy sessions were scheduled and administered for 2 month one week, 3 sessions per week in alternative days each session last for 1 hour and after the treatment sessions the post-test values were collected and tabulated.

Table I: Graph I: shows that comparison between control and experimental group pre-test score mean values 144.60, 145.47; and 't' value is 0.2410, 'p' value is 0.8113, the table value is 2.05; the t value is lesser than the table value, which shows it is not statistically significant and there is no difference between pre-test values of control and experimental group.it denotes that there is no difference between control and experimental group subjects.

Table III: Graph III: shows comparison between control pre-test and post test scores the mean values are 144.60, 144.27, respectively and t value is 1.7838 And p value is 0.0961 and the corresponding table value is 2.15, the calculated t value is lesser than table value It shows there is no significant difference between pre and post test scores of control group.

Table II: Graph II. shows comparison between experimental group pre-test and post test scores the mean values are 145.47, 135.33, respectively and t value is 12.4226 and the p value is 0.001 and the corresponding table value is 2.15 hence the calculated t value is greater than the table value it shows there is an extremely significant difference between pre-test and post-test values experimental group. So the experimental group has significant improvement.

These results are supported by the study done by this study examined 7 outcomes **Anne G. fishes, Elizabeth A Murray, Anita C. Bunday. etal (2008)** The objective of the study is the "Therapeutic use of music in occupational therapy "music is a modality present in occupational therapy. This paper consider my read of possibilities for actioners considering using music, providing a resources research within and outside the field. The potential effect of music the areas of pain/discomfort, movement, emotion, meaning/motivation, cognition, self-expression/communication, relationship/groups are discussed in items of enhancing communication.

### Montello and coons, E.E (1998)

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### Mark C.Edwards and Benjamin Sigel (2015)

He conducted a study on "Estimates of the utility of child behaviour checklist/teacher Report form attention problems scale in the diagnosis of ADHD in children referred to a specialty clinic" in the year 2015.The purpose of this study was to provide estimates of the diagnostic utility of the attention problems scales from the child behaviour checklist and teacher report form in the assessment of ADHD in

children referred for evaluation to a specialty clinic. Results showed slightly higher quality of efficiency than parent ratings when teacher ratings were included in the diagnostic standard.

Table IV: Graph IV: Shows comparison between control and experimental post test score mean value 144, 27; 135.33 respectively t value is 2.6057 and p value is 0.0145 and the corresponding table value is 2.05, hence the calculated t value is greater than table value. It shows there is significant difference between post-test values of control and experimental group.

These results are supported by the study done by This study examined 3 outcomes Occupational therapy in health care, vol;22,no.1,8 jan.2008

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### **7. Conclusion**

- The experimental group who active and passive participation in music therapy showed better reducing in social emotional problematic skills among children with ADHD as compared to control group.
- There is a significant reducing in the socio emotional problematic skill of ADHD child through active and passive participation in music therapy treatment. From this it can be concluded that music greater than active music therapy compare to passive music therapy was an effective tool in bringing out socio emotional changes in ADHD children.

### **8. Limitations & Recommendations**

#### **Limitations**

- Study was done with limited sample size.
- Study was done with ADHD.
- Study was done on confined age group between 6-12yrs.
- Study was done with limited duration.
- Male and female comparison is not included in this study.

#### **Recommendations**

- Study can be done on larger sample size.
- Further study can be done with the age group other than 6-12 years.
- Study can be done in a longer duration.
- Study can be done on different age groups.
- Male and female comparison can be done.

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### Author Profile



**M. Mahendran is from** J.K.K.M.M.R.F. College of Occupational Therapy, Ethirmedi, Komarapalayam. Namakkal District, Tamilnadu – 638 183



**Dr. T. Jagadeesan Mot (Psy) is co author of the paper.**