# TITLE

# "Motivation and Relaxation using ABT to enhance Language Acquisition and Articulation in Adolescents with Autism"

Author:

Anagha.K.A

**Organization:** 

**Snehadhara Foundation** 

# **CONTENTS**

ABSTRACT	2
SECTION 2: INTRODUCTION	3
2.1 THE LARGER PROBLEM	4
2.2 DIAGNOSIS OF INDIVIDUAL CLIENT NEEDS	6
2.3 LITERATURE REVIEW OF CREATIVE ARTS THERAPIES:	13
2.4 HYPOTHESIS:	18
SECTION 3: METHODS	19
3.1 ELIGIBILITY CRITERIA FOR PARTICIPANTS:	20
3.2 LOGISTICS:	20
3.3 DATA SOURCES AND DATA COLLECTION PROTOCOLS:	21
3.4 METHODS USED:	22
SECTION 4: RESULTS	23
4.1 RESULTS SUMMARY:	24
4.2 RESULTS DETAILED:	31
SECTION 5: DISCUSSION	50
5.1 LIMITATIONS	51
5.2 LEARNINGS:	52
5.3 FUTURE:	54
5.4 GLOSSARY	55
APPENDIX-A	56
APPENDIX-B	61
APPENDIX-C	62
SECTION 6 : ACKNOWLEDGEMENTS	77
ACKNOWLEDGEMENTS	78
REFERENCE	79

### ABSTRACT

- 1.1 The research project was conducted on a group of 6 children with Autism Spectrum Disorders all selected participants range between the ages 10-19 years and share the same learning space.
- 1.2 The research was conducted to explore the link between aggression; instability in mood (Composite Domain) and articulation, and language acquisition (cognitive domain) using Arts Based Therapy. The core of the research was to study the relationship between relaxation and articulation (spontaneity, grammar, comprehension and articulation). The goal of the sessions through this project was focused on articulation and vocalization depending on the need of the group. A base line of their motivation and relaxation was taken as a starting point and another evaluation was done after 35 sessions.
- 1.3 The results were evaluated to see if there are any changes in their motivation and relaxation due to articulation. The results showed that there was an increasing shift in articulation and there was an increasing shift in the level of relaxation also, thus proving the hypothesis that "Arts Based Therapy can be used to improve narrative capability, articulation, and enhance social skills in adolescents with autism spectrum disorder thereby decreasing behavioral issues".

# **SECTION 2: INTRODUCTION**

## **2.1 THE LARGER PROBLEM**

Autism Spectrum Disorders (ASDs) are a group of developmental disabilities that cause significant social, communication and behavioral challenges. People with ASDs handle information in their brain differently than other people.

ASDs are "spectrum disorders" that means ASDs affect each person in different ways and can range from very mild to severe. Adolescents with ASDs share some similar symptoms, such as problems with social interaction. But there are differences when the symptoms start, how severe they are, and the exact nature of the symptoms. Some of the common issues faced by adolescence with autism are

- Social difficulties
- Communication difficulties
- Imagination difficulties
- Challenging behavioral problems, such as aggression and self injury
- Mental health problems, such as anxiety or depression
- Sleep disorders, (insomnia)
- Sensory issues, (hyper or hypo sensitivity)
- Gastro intestinal problems, (diarrhea)

There are 6 children in the Study group with autism spectrum disorder. Some of the issues commonly faced by this group are self-expression (social difficulties), articulation (communication difficulties) and behavioral problems, though there are individual differences.

#### Vision:

There is a possibility that there is a co-relation between 'lack of language acquisition and articulation' and 'increase in aggression'; leading to behavioral issues. By helping the group overcome their lack of language and articulation, it could make a difference in their ability to regulate relaxation and tension which in turn would decrease their aggressive behavior. The clients in the group have varied abilities of verbal expression and articulation. By virtue of them being in a group there is an inbuilt mechanism of facilitated interaction and growing together. This research study involves the use of Arts Based Therapy and no other intervention to address the hypothesis.

#### PLAN:

# It is an exploratory study using the precepts of action research methodology.

"To explore the link between aggression; instability in mood (Composite Domain) and articulation, language acquisition (cognitive domain) in an adolescent group using arts based therapy".

## **2.2 DIAGNOSIS OF INDIVIDUAL CLIENT NEEDS**

#### Naman Somani

10-8-1999 14years Male

#### Family background:

He lives in a nuclear family of 4 people, mother, father and his younger brother.

#### Academic and rehab teacher's input:

RDI (Relationship Development Intervention) distance learning method is followed at home from 2008; he takes a while to process information when people talk to him. He has studied in an integrated school till 5th grade. He can read well.

#### Medical background:

Naman is on Fluidic liquid since November 2001 (anti-anxiety medicine)

#### Strength and weakness

He has good vocabulary; he is very independent to go to neighborhood shops for purchasing. He can swim, bike ride, table toss.

He likes planning trips but it makes him very anxious, his anxiety leads to keep asking repeated questions about the plan, which he is already aware of, He has low muscle tone (dislikes sitting straight for long time).

Naman is capable of reading and writing independently. He requires help by reminding him about social appropriateness.

#### CREATION

Naman's area of need is self-expression, with primary focus on, ability to regulate relaxation and tension (ritual and risk) .The second area of focus will be client's perception on pleasure /pain. There are times he does not know how to react appropriately in certain situations

#### Ahan Nadapana

19-10-1997 15years Male

#### Family background:

Ahan lives with his mother and grandparents. He has two uncles with whose families he interacts with regularly. Mother works part time and grandfather is a retired government officer and grandmother is a homemaker.

#### Academic and rehab teacher's input:

Besides few months of schooling and therapy in Chennai and Bangalore over the years there has been no schooling till age 14.

He is intolerant to other distractions and irritable from the surrounding. He is sensitive to loud sounds, clapping, others singing and touch. He is meticulous about routine, but accepts change with prior preparation.

He is good in picking up languages and general information (Wikipedia)

He is good with computers and operating devices. He likes to have limited number of options among which he chooses his food and clothing every day, and. He eats only limited food and does not like sharing his food He likes reading books (of his choice)

#### Medical background:

He is on Homeopathy medicines for nasal allergy and sneezing.

#### Strength and weakness

He is a very affectionate child and he is kind and considerate to others. He has good ear for music and rhythm.

He gets upset if there is no electricity and he is very sensitive to noise When he gets angry and is triggered he starts banging his head on others or against the wall. He is reflective and understands if the situation is explained to him. He does not like physical activities / games.

#### CREATION

Ahan's area of need is self-expression, initially a little more focus on conditioned response to relevant people role or situation, ability to regulate relaxation and tension (ritual and risk) .The second area of focus will be articulation, spontaneously use words and sentences.

#### Karthik. R. Dixit

06-05-1998 15years Male

#### Family background:

He lives in a nuclear family of 4 people, mother, father and his elder sister.

#### Academic and rehab teacher's input:

He can read sight words, "Picture Exchange Communication System(PECS)" was introduced to him to help his communication, functional words have to be introduced to him and simultaneously communicating without prompts has to be encouraged. He takes time to participate in a session voluntarily. He can learn a song quickly.

#### Medical background:

He was diagnosed for autism spectrum disorder in 2001. Different kinds of medication were given for his aggressive behavior at different phases these medications has associated side effects that were a lot to deal with in them. March 6- 2013 was his first seizure (4 times in 30 minutes) for which he is under healing therapy. He has experienced frequent cold and allergic reactions, and constipation since childhood.

#### Strength and weakness

He gets tired very easily after a physical activity. He keeps a watch on his surroundings and people. He likes to spin a ball before throwing it. He can run very fast when he needs something.

He dislikes reading and writing. He likes holding on to small objects and would not part from them easily. He finds difficulty in blowing his nose when he has cold and this is a concern since he is prone to cold most of the time.

#### CREATION

Karthik's area of need is motor development, with focus on vocalization of sounds and vowels and breath work. The second area of focus will be sequencing of information, structuring and pattern recognition.

#### Nihal Vithal Madyalkar

10-8-1996 17years Male

#### Family background:

He is from a close knit family, mother, father and he has a younger sister whom he loves. He is loved by his immediate and extended family.

#### Academic and rehab teacher's input:

Nihal has changed his school around 7-8 times both in special and normal schools. His mother has been homeschooling him until 2012. He gets restless and violent when he cannot use the computers. He is skilled with computers. He requires little encouragement to do an activity especially with singing or playing an instrument. His speech is not age appropriate. He likes the idea of studies with books.

#### Medical background:

He has undergone speech therapy and neuro feedback for 3 years.

He is on homeopathic treatment from Dr. Deepak Tibrewal.

#### Strength and weakness

He has good ear for music, but a little shy to sing or play an instrument.

He has little interest in art activities.

His comprehension is good.

He tries to grab food from other if he likes it.

#### CREATION

Nihal's area of need is self-expression, with initial focus on ability to regulate relaxation and tension (ritual and risk) the second area of focus will be articulation, spontaneously use words and sentences, verbal expression.

#### Sanjeev Murali

03-10-2003 10 years Male

#### Family background:

He lives with his parents, mother is a house wife and father is working at Tata Consultancy. Sanjeev has a twin sister. He has been living with his aunt during the course of the study.

#### Academic and rehab teacher's input:

Sanjeev was identified with "borderline autism" at about 2 years.

He understands instructions and can communicate his needs through nonverbal cues. He has low attention span. He is not dependent with his daily living skills. He can identify patterns and work on them.

He is able to recognize people and himself in photos. He can also recognize his belongings. He finds it difficult to interact with his peer group.

Sanjeev is very impulsive and hates to wait; he has difficulty sustaining attention to one task. He requires repetitive instructions to respond to instructions.

#### Medical background:

Besides being diagnosed as "borderline autism" there is no much medical history available.

#### Therapies undergoing:

Speech therapy Occupational therapy Play therapy Music therapy

#### Strength and weakness

He likes to play with paper rolled in his hands. He hits himself when he is irritated or starts biting or pinching if he is unable to express his needs. Sanjeev is sensitive to sounds like crackers or sudden sound; he does not like crowded places. He likes listening to music, and playing on swing. He is non-verbal but he can understand instructions and follow them. He cannot understand group instructions.

#### CREATION

Sanjeev's area of need is motor development, with initial focus on breath work and motor planning .The second area of focus will be stimulus response learning.

#### TIMTIM VERMA

07-10-2002 11years Female

#### Family background:

She lives with her parents; mother is a home maker having completed her course on autism (diploma).father works as a manager at Hewlett-Packard Company.

#### Academic and rehab teacher's input:

Timtim has not been to any formal academic institute She has been home tutored by her mother who is a special educator herself. She is good with her daily living skills. She has good logical reasoning ability. She has very good fine motor skills. She does not like it if things are against her will.

#### Medical background:

There is no medical history.

#### Strength and weakness

Timtim is moderately hyperactive girl.

She is verbal, she can only repeat the words told to her but she finds it hard to use that for her communication. She can socialize with a little ease if it's with her own age group. She can take care of herself independently.

She likes to dress up herself. She is very particular about what exactly she wants though she does not know how to express her needs.

Since she is unable to communicate she bites to show her resistance, pain or dislike. She has low sitting tolerance; she has resistance to learn new things from an unfamiliar person.

#### CREATION

Timtim's area of need is self-expression, with initial focus on ability to regulate relaxation and tension (ritual and risk). Her second area of focus will be on usage of language- words and sentences.

# 2.3 LITERATURE REVIEW OF CREATIVE ARTS THERAPIES:

Art Therapy to Treat Autism was published by American Art Therapy Association,

One of the hallmarks of autism spectrum disorders is difficulty with verbal and social communication. In some cases, people with autism are literally non-verbal: unable to use speech to communicate at all. In other cases, people with autism have a hard time processing language and turning it into smooth, easy conversation. People with autism may also have a tough time reading faces and body language. As a result, they may have difficulty with telling a joke from a statement, or sarcasm from sincerity.

Meanwhile, many people with autism have an extraordinary ability to think visually - "in pictures." Many can turn that ability to good use in processing memories, recording images and visual information, and expressing ideas through drawing or other artistic media. Art is a form of expression that requires little or no verbal interaction which can open doors to communication.

All too often, it's assumed that a non-verbal person or a person with limited verbal capabilities is incompetent in other areas. As a result, people on the autism spectrum may not be exposed to opportunities to use artistic media - or the opportunities may be too challenging in other ways (in large class settings, for example). Art therapy offers an opportunity for therapists to work one-on-one with individuals on the autism spectrum to build a wide range of skills in a manner which may be more comfortable (and thus more effective) than spoken language.

Semin Speech Lang's article on **Social Stories**' Help Children with Autism Improve Social Skills' said Social stories are short, carefully crafted stories written to help children (and adults) with autism to navigate specific situations. In theory, they allow people with autism to prepare for and rehearse social interactions - thus reducing anxiety, improving behavior, and helping set the stage for building solid relationships. Evidence suggests that social stories - developed with a specific approach and format - really do make a difference in helping people with autism cope with social interactions. But it's important the stories be constructed appropriately. According to the Healing Thresholds website (citing Carol Gray, developer of the Social Story(tm)

An article on Peer play interventions to support the social competence of children with autism spectrum disorder, by Prendeville JA, Prelock PA, Unwin G said that Children with autism spectrum disorders (ASD) have difficulty connecting with others because they often lack the communication, social interaction, and play skills necessary for developing relationships with their peers. This article highlights the characteristics of four peer intervention programs described in the literature that have been successful in facilitating the social connections between children with ASD and their typical peers. The environments established for intervention, the role of the typical peer, and the role of the adult are described across the four programs. A fifth peer intervention program is introduced that focuses on establishing peer connections in the home of the child with ASD while facilitating bids and responses for behavior regulation, social interaction, and joint attention in the child with ASD and his or her typical peer in the context of play. Implications for practice are provided as clinicians consider the role peer mediation has in intervention planning and implementation for children with ASD.

An article on Language play in children with autism spectrum disorders: implications for practice by Corbett E, Prelock PA revealed the use of language play by children with autism spectrum disorders (ASD) within the context of play with peers. A conceptual framework for the development of language play is described. This framework, which is supported by the literature on language play in typically developing children, is used to assess patterns of language play in children with ASD. The findings of a descriptive study are used to provide evidence for language play in the speech of children with ASD during interactions with typical peers and show that children with ASD use language play in a similar way as their typically developing peers with the exception of age of occurrence. Implications for clinicians in their work with children with ASD are discussed as they relate to the existence of language play in children with ASD and the function of language play as a tool for language learning.

In a study on **Drama therapy**: a possible intervention for children with autism by Caplan, Kerri (2006) he discovered The most widely used and most successful treatment for children with autism is known as Intensive

Behavioral Intervention (IBI) and allows for a significant increase in cognitive, behavioral and language skills. However, there seems to be a gap in this form of treatment between the known benefits and the possible improvements in emotional expression and social interaction. I have witnessed the gains in cognitive, behavioral and language skills for children with autism receiving IBI, but I have yet to see these children increase their range of emotional expression and social interaction with the aid of IBI. An important question that I would like to pose is, is it possible for other treatments such as Drama Therapy to be an effective intervention for this population and can it fill that gap? This paper examines the process of two children with autism and the use of drama therapy as an intervention for these children. The first case study looks at the process of a four year old male with autism who is non-verbal and the second case study follows the process of a seventeen year old male with autism who is verbal. The main goal for each child was to have them learn how to express their emotions through drama therapy as well as increase their social interaction skills through drama therapy. I incorporated the guidelines of non-directive play therapy created by Virginia Axline (1969) and through this incorporation I witnessed each client learn how to form a new relationship, express their emotions and learn new social skills

A Brief Report: Theatre as Therapy for Children with Autism Spectrum Disorder by Blythe A. Corbett, Joan R. Gunther, DanComins, Jenifer Price, Niles Ryan, David Simon, Clayton W. Schupp, and Taylor Rios. The report showed that the pilot investigation evaluated a theatrical intervention program, Social Emotional NeuroScience Endocrinology (SENSE) Theatre, designed to improve socioemotional functioning and reduce stress in children with autism spectrum disorder (ASD). Eight children with ASD were paired with typically developing peers that served as expert models. Neuropsychological, biological (cortisol and oxytocin), and behavioral measures were assessed in a pretest–posttest design. The intervention was embedded in a full musical theatrical production. Participants showed some improvement in face identification and theory of mind skills. The intervention shows potential promise in improving the socioemotional functioning in children with ASD through the utilization of peers, video and behavioral modeling, and a community-based theatrical setting.

According to a study Music Therapy Improves Behavior in Children with Autism, *Feb. 19, 2013* — Weekly music therapy sessions can have a positive

effect on behavior in children with autism, reports a paper in **Pertanika Journal.** In a study of 41 children, improvements were seen particularly in inattentive behaviors over a ten month period.

Weekly music therapy sessions lasting just an hour can have a positive effect on behavior in children with autism, reports a paper in Pertanika Journal this month. In a study of 41 children, improvements were seen particularly in inattentive behaviors over a ten month period. The researchers hope that their research will help children and young adults with autism to modify behavior.

US Centers for Disease Control statistics state that one in every 150 children in United States is diagnosed with autism -- that is one new diagnosis in every 20 minutes. And the number is on the increase. Music and movement therapy has been used to address physical, emotional, cognitive, and social needs of individuals of all ages. Interventions can be designed to promote wellness, manage stress, alleviate pain, enhance memory, improve communication, and promote physical rehabilitation.

C M See of the University Sains Malaysia divided the group into two age categories -- two to ten and eleven to twenty two -- and rated their behavior on a target behavior checklist developed specifically for the research. Over a ten month period they alternated two different hour-long sessions of music therapy and measured the children on the target behavior checklist on a monthly basis. For behaviors such as restlessness, aggression toward other children, noisiness and tantrums more than half of each group improved by one or two points on the scale.

Some children showed no changes and a couple regressed. Overall the research suggests that the therapy has positive effects on the children's behaviors, but particularly with inattentive behavior.

#### **Drumming as Therapy**

Studies have shown that music, along with other positive attributes, can have a profoundly healing affect. Music therapy has been used with great results in pain management, correctional and rehabilitation settings, with those who have suffered a trauma or crisis, Alzheimer's patients, autistic patients, and with a whole host of other conditions and settings.

Drumming in particular, has been shown to have many positive effects. Drumming stimulates the right hemisphere of the brain, which is responsible for emotion, intuition, creativity, and relaxation. This stimulation reduces blood pressure (and stress and anxiety by extension) as well as decreases pain levels for those suffering from chronic pain. Research also indicates that music and drumming increases your level of dopamine (the feel-good neurotransmitter), which helps those battling depression or other mental illnesses.

Promoting personal healing with drumming can be as simple as picking up a djembe and joining a drum circle. As research continues to be brought forth proving the deeply healing effects of rhythm, music and drum therapy will likely continue to gain momentum as widespread alternative treatments.

## **2.4 HYPOTHESIS:**

Self-expression Domain and articulation are interrelated with respect to the adolescent group. There is a possibility that due to lack of language acquisition and articulation a child could have issues like aggression, instability in mood, conditioned responses to situations.

#### The hypothesis of the project:

"Arts Based Therapy can be used to improve narrative capability, articulation, and enhance social skills in adolescents with autism spectrum disorder thereby decreasing behavioral issues".

# **SECTION 3: METHODS**

## **3.1 ELIGIBILITY CRITERIA FOR PARTICIPANTS:**

All selected participants were adolescents with autism ranging between the ages 10-19 years. All the members of the group go to the same learning space. They have been constituted as a group together for the first time and do not go for any other therapies. This is their only intervention.

During the pilot phase the age of the group was too vast ranging from 6-14 years hence children below 10 years were excluded and 3 adolescents (Kartik, Naman and Nihal) were added to the group. The reconstitution of the group worked better with the existing hypothesis. Criteria of selection was based on

#### Demographics of the group:

AGE	10years – 19years
Gender	1 girl and 5 boys
Background	From a middle class economic family

## **3.2 LOGISTICS:**

The study was conducted at "SNEHADHARA FOUNDATION"

An organization that works with children and adults with special needs using Arts Based Therapy, located at J.P. Nagar, Bangalore.

The study was carried out in a classroom which was well lit, ventilated and easily accommodated 10 adults.

The sessions started from 3rd June and ended on 23th august. The sessions were scheduled as 3 sessions per week i.e. Tuesday, Wednesday and Friday, from 10:45- 11:45 am.

# **3.3 DATA SOURCES AND DATA COLLECTION PROTOCOLS:**

#### **Data Collection Formats: (See Appendix A)**

Appendix A - A 5 point scale observation table based on Motivation, relaxation and articulation was formed to observe the effect of articulation on motivation and relaxation. These questionnaires were given to other professionals working with the child. The assessment using the questionnaire was filled twice- once in June to assess the base line of the group, and the second was made in  $4^{th}$  week of August.

#### **ABT Assessment tools:**

Appendix B- The ABT tool NCD (Narrative Capability Development) scale was used to assess articulation. This was monitored by the facilitator in June and August.

During the pilot phase EPR was chosen to assess self-expression (social skills) but as the study progressed it seemed like EPR was not much relevant to the hypothesis hence EPR was not used in this study.

DATA COLLECTION	FREQUENCY
OBSERVATION TABLE	$1^{ST}$ session, , $35^{th}$ session
NCD scale	$1^{ST}$ session, , $35^{th}$ session
Video recording	Event based

The observer is one of the teachers who has worked closely with the children, observers were given the observation formats before entering the session and they were asked to sit through the session as a silent observer and mark their responses truthfully and unbiased.

Video documentation- Video recording was done by Abhinav.B and Yashaswini.G.Inamdar. They were guided through the process to capture moments during the sessions. Video recording was event related, since there were moments that were magical which could not be compared to their past, a video has been created to capture all these magical moments through the study.

# **3.4 METHODS USED:** (See Appendix C for SRS summary format)

35 ABT sessions were conducted from early June till mid-August, most of the sessions were focused on articulation and vocalization so the goal of the study is kept intact, and the sessions were a combination of different art forms –namely voice, movement, music, story, and visual arts.

Combining these art forms allowed space to push boundaries. These art forms allowed the group to experience discomfort which led to tension and then explore a way to express that discomfort in a safe way.

The sessions were designed in a progressive way such that there was a gradation in the challenge it posed and at the same time was not repetitive in nature. Repetition in the session does help with enhancing imitable skills and aids in pattern formations. However keeping in mind the age group of this group it was intentionally avoided to see adaptability to change and scenarios. Having said this, there was a common ritual and a closure only for them to know the start and end of the session, with a few repetitive sessions.

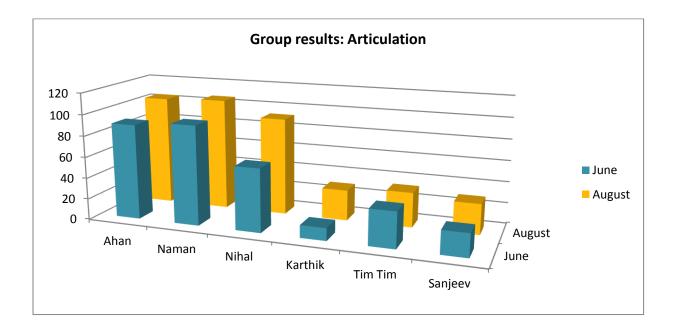
Observations, assessments and video recordings were done through these 35 sessions. Motivation and relaxation was assessed in early June to know the base line and later during the end of august, motivation and relaxation was nowhere considered as a main goal through the 35 sessions, since the aim of the study is to see the effect of articulation on motivation and relaxation. (refer appendix A)

# **SECTION 4: RESULTS**

### **4.1 RESULTS SUMMARY:**

#### Articulation

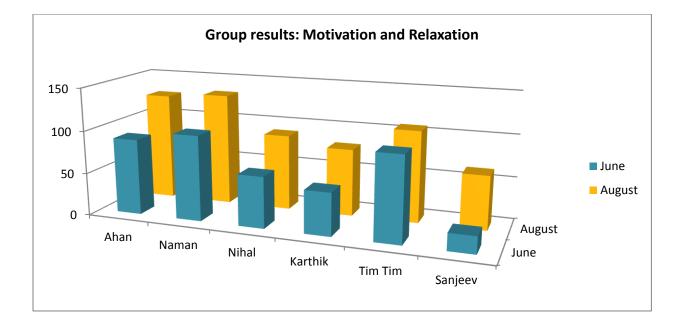
#### Graph 1.0



- The above graph clearly shows the progress made by the whole group in articulation from early June to mid-august.
- The progress is clearly depicted by yellow bars which show an upward trend in the month of August compared to blue bars which depicts the month of June.
- The graph is based on the Articulation questionnaire which had 4 sub categories, articulation, comprehension, spontaneity, grammar.

#### **Motivation and Relaxation**

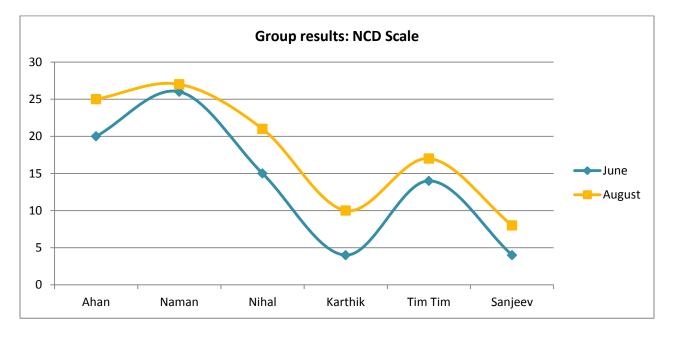
#### Graph 1.1



- There is a visible upward trend in the month of August compared to June.
- This is indicative of the fact that the group was a little more relaxed during sessions.
- It was also observed that there was a visible increase in their motivation levels.

#### **Narrative Capability Development**

#### Graph 1.2

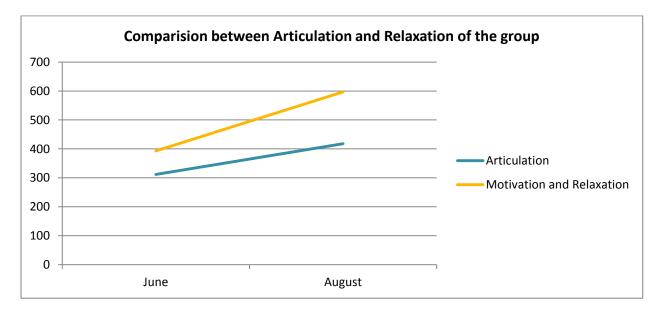


ABT Tool: NCD scale

- The above graph shows the comparison of the NCD scale results obtained in the month of June and August.
- The above results show that there is marked improvement by the group in articulation though only marginal progress is seen in the case of Naman.NCD scale has helped to track these small shifts.

#### Articulation and Relaxation

#### Graph 1.3



The group goals through all 35 sessions were based on articulation. This is depicted in the graph above.

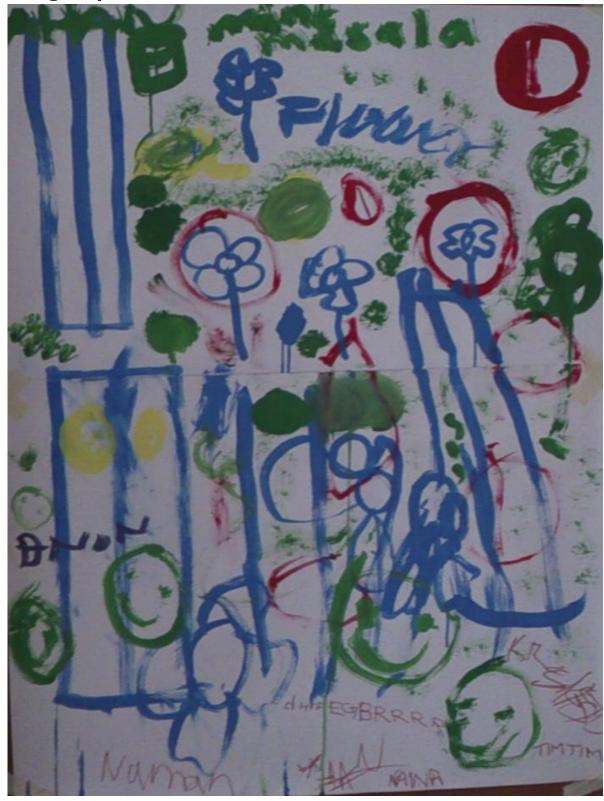
The marked improvement in motivation and relaxation is quite visible.

The linearity of the upward lines in both Articulation as well as in motivation and relaxation support the intent of the hypothesis. There is a proportional link between increase in articulation with respect to motivation and relaxation.

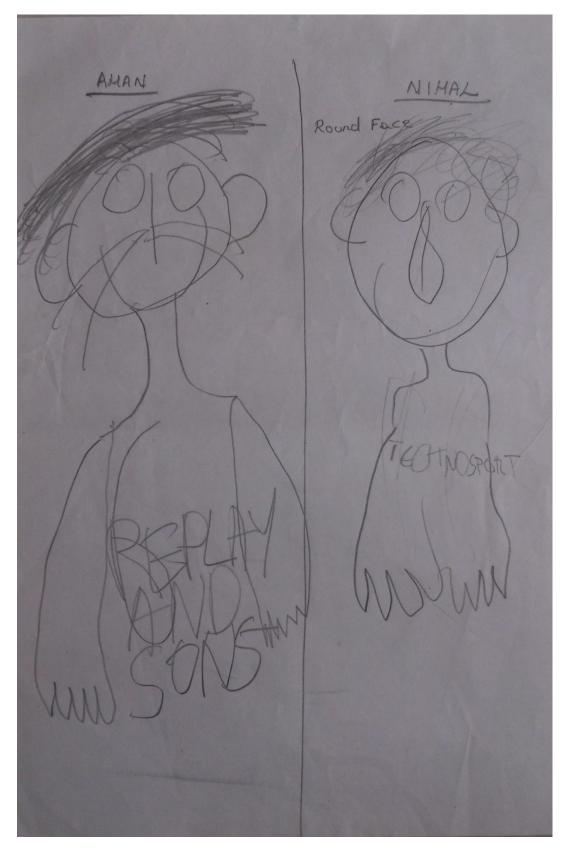
A story of 5 friends created by the group.

were & Friends Joey charley, NIMAK, KARTMIK, AMAN, Wants to meet queen Band On the previous day. Dawson's Greek the movie on the next day. In the Present day 5 formende cant to meet a boy bond one policetion. They went to Chennai by a Local Train Pher They asked for Water for the 6000 Pornie of ocean. They din't give water because of Refugee & Sun news. They decided for having for by going to mesongo sound by from BOLLYWOOD to HOLLYWOOD bubile Nihal is very Jolly good In the rain of Beverly hills among sunflow persedrose, guinahar, margold, prety poppy, dahlia and reaflow They watched Amul Bollywood News made in U.S.A The story Ends with Kenthik Saying MADE IN IND

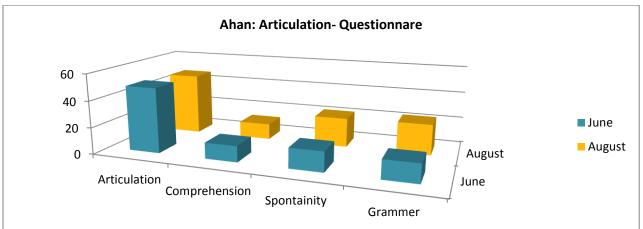
Group painting, where a child had to follow a stroke from a leader in the group. Session -



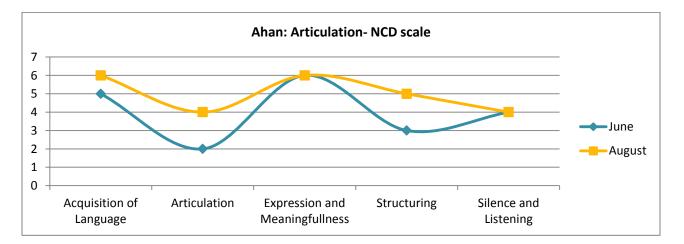
# Partner work by Nihal and Ahan



## **4.2 RESULTS DETAILED:**

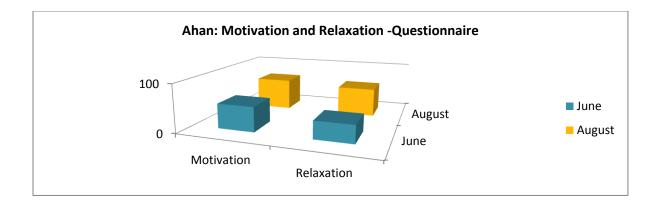






He is more spontaneous with some words which are a part of his daily routine, and he is careful with his grammar while talking. He is on his journey to talk and express his feelings He is slowly using language to express his happiness and frustration with lesser prompts. He makes an effort to articulate but gets frustrated when he can't find words. There is a lag between his mental processing and verbalizations.

Ahan enjoyed most of the sessions like TV channel sessions, being a radio jockey and story sessions. His ability to stay quiet and listen to others is very marginal but he is on his way to make that shift.

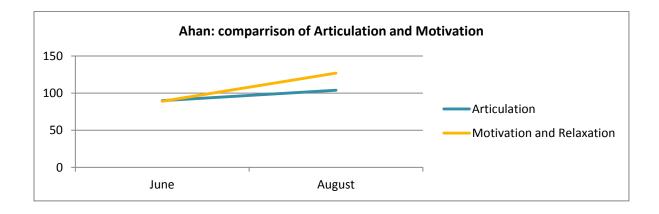


His participations during the sessions are quite active. Ahan would get upset by a little change in the routine; he has shown marked improvement in these 35 sessions by being more relaxed in accepting the changes that have happened around. A visible shift has been seen in his ability to accommodate changes and his response to situations.

He has taken time to accept those small changes that are being made by others.

He responded very well to "caught up with partner" where he had to cater to others request and plans.

There have been times where he could not cope with the changes and lost his calmness.



A shift in his spontaneity, articulation, has helped him be more relaxed.

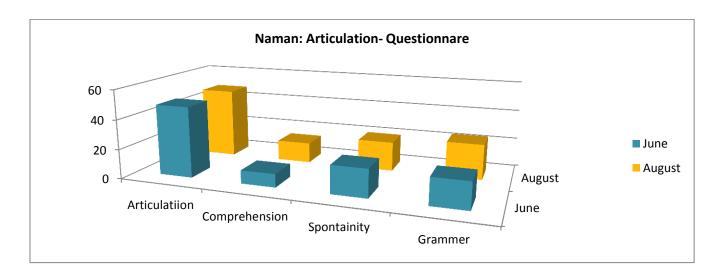
#### Ahan's first story

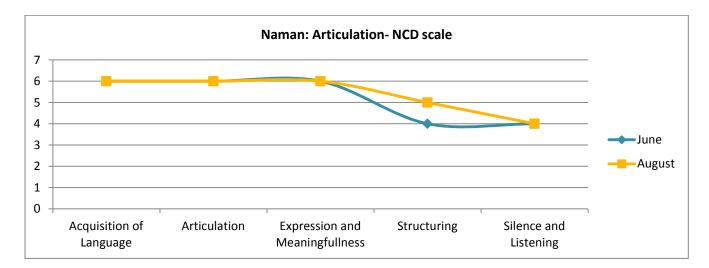
Chinnaponno comes lo Banatos and going to shapping mall going to Kashi vishwarath temple Eating gagan ha holdes during moreon and coffee shop & go to Tait (Thank god It's Friday in Banaras going for Bowshing ally and cinema hall to meet sanju Baba and Says I have you one day chinnaponno and decided to go to a but seeing a b and meet a multim boy. cleaning aburka crash into bridger in the accident of fine in kedernat china & muslim Love get hart at body Lying in ca tempte passes away, one year later Chinaponu Luxury house in vancovat canada a tribute to chimapono & a mo 604 THE END

#### Ahan's release of his movie "Dhoop Wale Dulhaniya Le Jayenge"

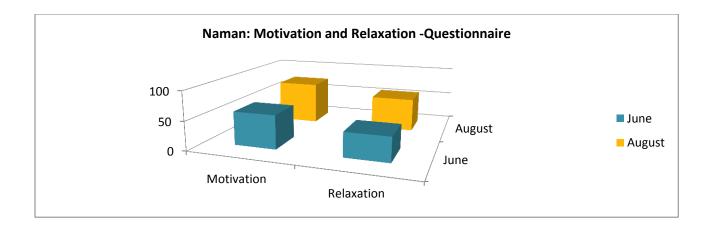
Dhoop Wale Didhaniya Le Jackrige About Alan & Pallare They Ale in New York & San Flaninco They Ale gong in taxi to San Fransico To see Pallaria New House Hause Nome Snehodhala Mathuests Bedloon Hall & Kitcha They cat English & Spanish Good Possa Chika & Pacios and many 1 from After Eating they will go to the Wall and watch Universal Movies. Phan And Vallain Come to India, and fall in love each other THE END Director Gellanjali Salargan Its a Short Film Produced by Abhiran Weitter By Aragha

#### Naman



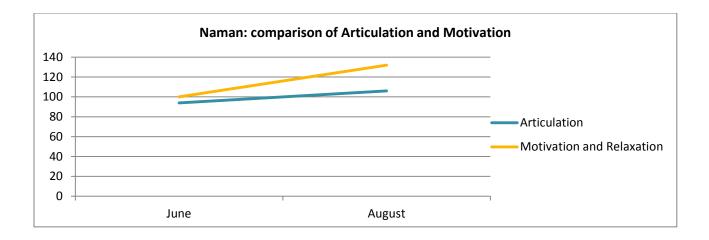


Naman has shown marginal improvement in structuring his sentences; articulation .There has been a minimal shift in his language usage. It is seen through these 35 sessions that he has started talking to his peer group, he likes taking care of others and takes up responsibility, he takes care of others with that much care like any other adult; he has started doing the ritual of the session by himself while the group followed him. His ability to lead and have others follow has helped in him taking greater responsibility for his behavior.



Earlier there was a tendency in Naman to keep asking the same set of questions over and over again. This was evident specially when it came to schedules and plans that involved travelling and going out.

Naman is a little more relaxed about his plans and schedules. It has been observed that the number of times he asks or tries to recall his plans (usually for the next week or overnight) has reduced. There are times he is to be gently reminded that the questions have been addressed. These days he spends more time on attending to his peer group.



The upward trend in the graph on articulation and relaxation show that articulation has helped him be more relaxed.

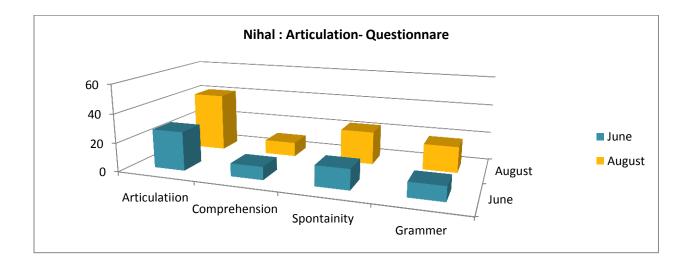
Along with the goals identified for him, what also emerged through the study was an improvement in his social interactions.

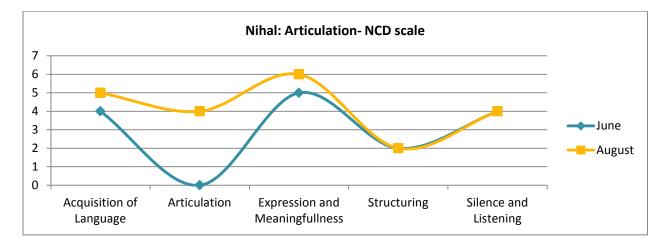
His acceptance to talk to his peer group, initiate conversations and taking care of the group has helped him be occupied and less self absorbed. This has helped him stay more relaxed and contained.



Naman's art work in a group painting session (finger painting).

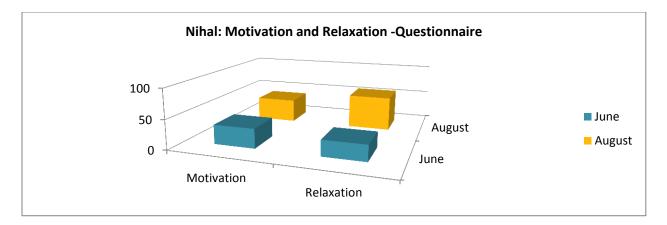
#### Nihal





Nihal has shown a marked improvement in articulating and expressing meaningfully.

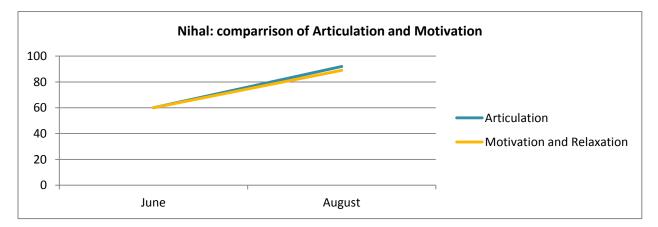
Nihal has shown improvement in holding contextual conversations. His responses are far more relevant. There are times when he does deviate and is uninterested in holding conversations. At such times his responses are monosyllabic to questions asked. He enjoys stories being written before him than those that are enacted or read to him. He enjoyed role play sessions through TV channels, movement and face painting.



Before the study Nihal's participation in group settings were highly minimal. It used to be a challenge to have him sit in a group during circle time sessions although he likes singing.

Nihal has shown a marked improvement in being more relaxed and motivated to participate in the sessions. He is now far more compliant and relaxed when it comes to sitting down in a group and hearing others.

He enjoys singing songs with the rest of the group. He has started singing when he is asked to and manages to complete the song. He does make requests sometimes.

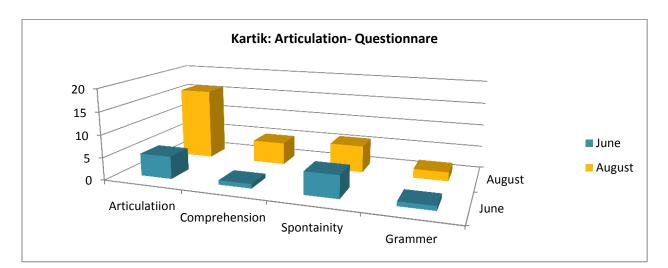


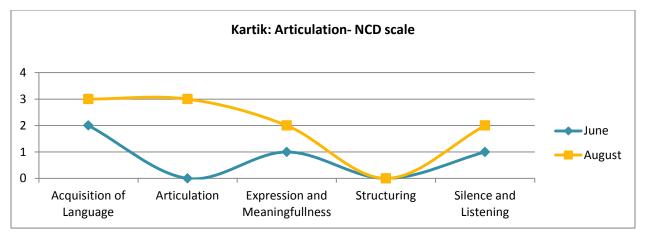
The above graph shows that there is a marked improvement in the area of articulation during this study. In the area of motivation and relaxation also there has been an upward trend. Greater articulation has enabled Nihal to be more calm and relaxed.

Nihal,s art work in a painting session (finger painting)



#### Kartik

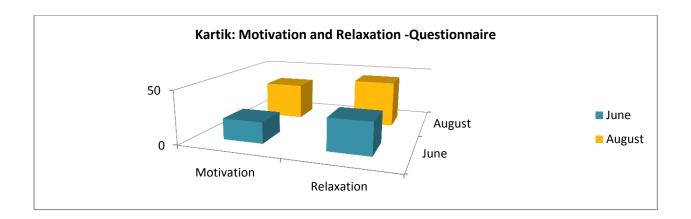




The two graphs above are well indicative of the fact that there have been visible shifts in Kartik in respect to his articulation. This has been tracked using the questionnaire and the ABT tool.

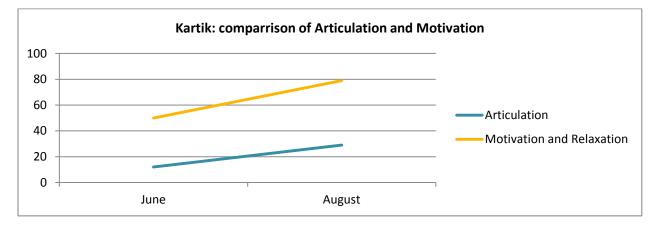
Verbalizations are more evident .Although using single words; he is making requests and articulating.

He enjoys singing; He is more participative during closures when we sit down for solo singing. Kartik is a good listener with regard to sounds and songs. He is also heard singing quite clearly. Speech clarity is not compromised when it comes to songs. Kartik has started responding to paints during this study and enjoys painting himself; he has started responding to most of the art forms and has willingly accepted them into his space.



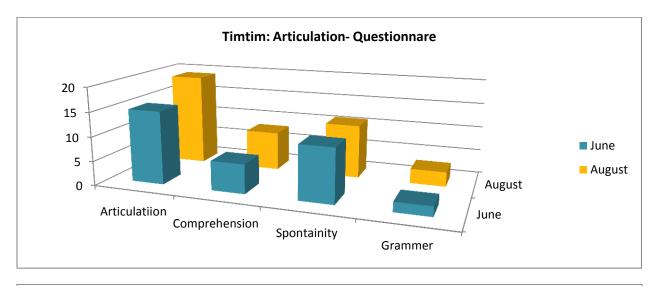
Kartik has started being more participative and gets involved in the session without any prompts.

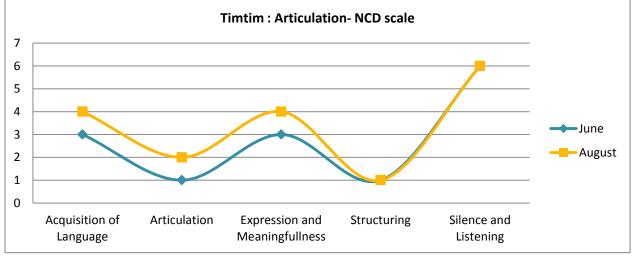
The above graph shows that there is an upward trend in the area of motivation and relaxation. His outbursts have been very sudden and unpredictable, most of the times it is due to dislike of any particular sound. Off late his outbursts are not as often found during sessions but there have been situations in other environments.



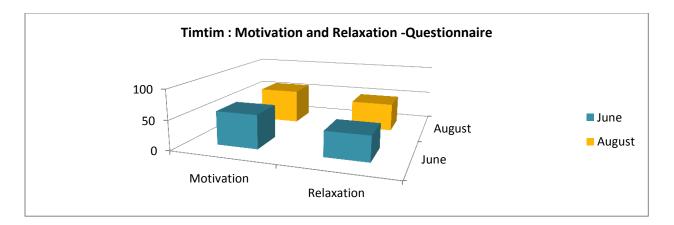
The above graph shows that there is a progression in articulation, motivation and relaxation over June and August. It also says that articulation has a positive effect on relaxation thus proving the hypothesis in Kartik's case.

#### Timtim

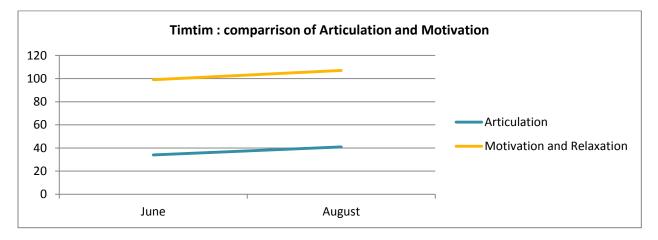




Timtim has been vocalizing a lot during the course of the study. She has started making demands for her favorite songs to be sung. She engages in a small make believe orchestra kind of set up and tries to sing along. She has started imitating small words and says it in her own little way. She is able to pick up a lot more sounds and make them. She is able to express herself monosyllabically. There are times when what she is trying to say sounds a little like gibberish. This is however beautifully complemented by her with relevant expressions and gestures.

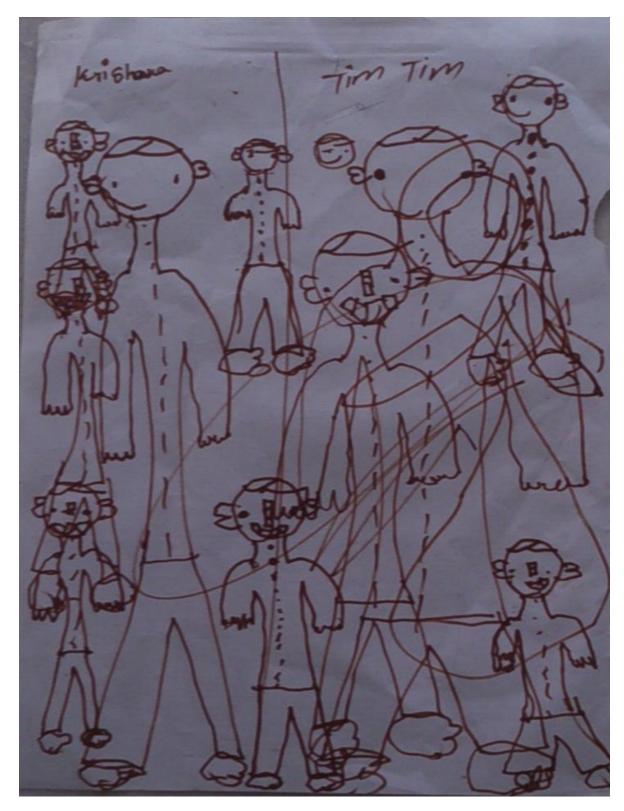


Timtim is a lot more relaxed and happy during sessions. She is still making her journey to be easy with her routine. There is rigidity that is still quite visible. What has helped in her relaxation is talking to her and preparing her for the situation. She is able to better relate to this talking and understand the context. Instilling fear and forcing her to do something has not worked. She has become a little open to reasoning.

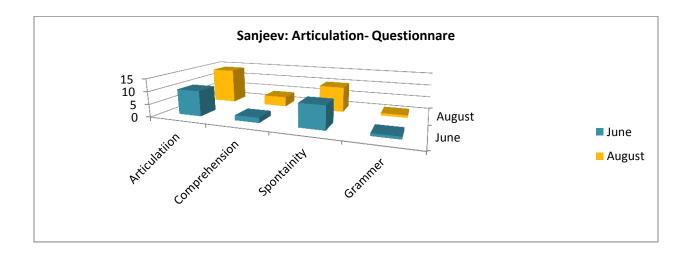


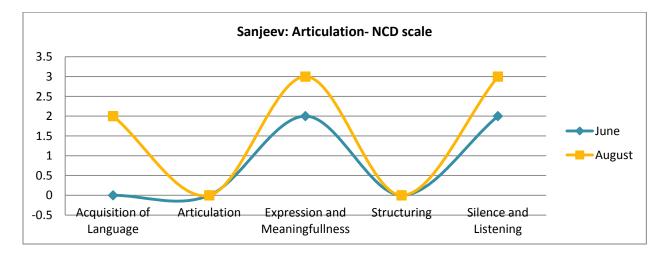
Her motivation to be in the class and pushing herself to talk has been very visible compared to the rest of the group. She is struggling and pushing herself to learn more (as per daily observation reports). She is open to learning and trying out new things.

The graph above shows a very mild progression in articulation, motivation and relaxation, the little shift seen in the graph shows that articulation has helped her be relaxed and calm. She has shown an acceptance to all art forms with ease and is participative. Timtim trying to draw krishna(her classmate) during a portrait session.

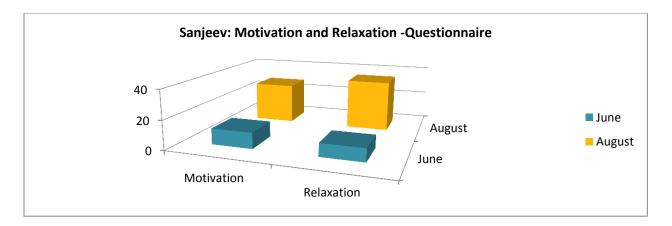


#### Sanjeev



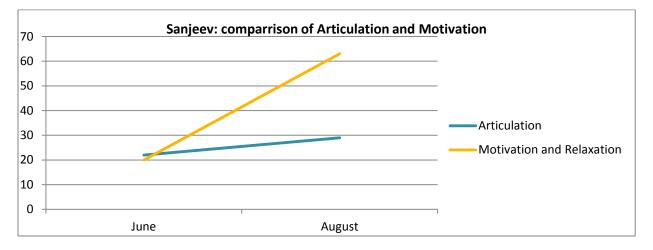


Sanjeev has shown marginal progress in articulating or vocalizing, He has started expressing 'Yes' or 'No' to anything. There is a sense of calm seen in him. Although this is quite sporadic in nature, Sanjeev has started enjoying drumming session and also asks for drums if it is happening in another class.



The above graph shows an upward trend in both motivation and relaxation. There is an incremental evident shift in both his levels of motivation and relaxation at the end of the study.

Sanjeev has started participating and getting into the session environment slowly.



Sanjeev has shown very mild improvement in the area articulation, on the other hand there is a huge leap in the area of motivation and relaxation.

### Art work by sanjeev (finger painting)



## **SECTION 5: DISCUSSION**

### **5.1 LIMITATIONS**

The duration of the study was only for 35 sessions, this seemed like a very short period because the group as a whole took time to get together.

The whole group could not be a part of a few sessions, together; because of absentees due to ill health. It had to be done as a one-one which did not have the same impact as the group would have. Absenteeism and irregularity posed a big challenge to the group sessions thereby affecting the group dynamics.

The goal of the study was too broad and this affected the observations and the direction of the study. It was too broad for the duration of the study; the same goal could have been very apt for long term. Since the goals were too broad the duration also seemed very less, a specific and a more definite goal could help in better understanding.

### **5.2 LEARNINGS:**

The process of the whole ABT from the pilot to the action research has been a huge learning at every step, beginning from being organized; to documenting each detail and letting go.

In the process of this study there were many episodes which revealed the interconnectedness across domains. Although there was a particular goal identified, what was interesting was to see upwards trends in other domains that were not specified in the study. It also revealed that the goals could be a little more specific and clear. This study has posed some questions which I feel is my step towards learning. The study was to understand aggression which generally is seen in adolescents as the study took its course, it has forced me to relook and redefine aggression as a most instant relief for frustration for this age group. I do not state to say that it is OK for them to harm others but I am in search of this magic tool which could substitute aggression. As "normal" individuals we like to store our aggression to form the stinky bin, on the other hand how wrong is it for a child to let out that frustration without storing it.

The group was heterogeneously balanced which gave space for them to pick up a lot from each other. Considering articulation was the goal, the group was well mixed to listen to others and pick up language from each other. This was also helpful for them to find their buddies to walk along this journey.

The study also helped the group to generalize and motivate themselves to listen to others around them.

The wide goal was lost in the process of the study and had to be requisitioned to be able to conclude, choosing a narrow and specific goal could better the quality of the study.

The adolescent age group has helped me to push myself to come up with challenging and more fun ABT sessions, it was a good learning to bring in art forms scaling to the group as a whole.

This group and SEG has helped to know the importance of balancing the self and staying calm even in critical situations and understand their discomfort. The roles of intent and healing metaphors have played a major role. Language is limiting when it comes to putting down the intent. This entire study seems to be more experiential and not expressible. It has been magical of sorts.

### 5.3 FUTURE:

This study can be taken forward as smaller bits and an elaborate study can be made.

The duration of the study can be increased for a detailed study.

Personally this whole study and course has led me forward to get deeper into what I am doing at present, working with arts and in the field of healing has become my priority. This journey has helped me answer most of my questions and ask many more questions to myself and has been a great healing for me.

The process of the study has been so inspiring that it has motivated me to start making plans on how I should be taking my group forward, since I have also been lucky to be work with this group in the future it can be explored in many more ways.

#### **5.4 GLOSSARY**

ABT- Evidence-based use of art forms to accomplish individualized goals within a therapeutic relationship

ASD- Autism spectrum disorder

RDI (Relationship Development Integration)

Fluidic liquid- (anti-anxiety medicine)

IBI-Intensive Behavioral Intervention

NCD Scale- Narrative Capability Scale

### **APPENDIX-A**

Questionnaire on self-expression and Articulation for observers.

Childs name	Age	Gender	Observers name	Date observation	of

#### **INSTRUCTIONS:**

Below are some statements that pertain to the child's behavior. Please indicate the appropriate option with each statement on a five point scale. You have to put a **tick** mark on the point which best indicates the child's behavior, there is no right or wrong answer, please answer them exactly and truly, be sure not to skip anything or tick all five points.

#### Level of Frequency- 5 point

- 1 Never
- 2 Rarely, in less than 25% of the chances
- 3 Sometimes, in about 50% of the chances
- 4 Frequently, in about 75% of the chances
- 5 Every time

	Motivation	never	rarely	sometimes	frequently	always
1	Happy when entered the					
	session					
2	Enjoys company of others					
3	Curious about the					
	surrounding/activity					
4	Does the activity because he/					
	she likes					
5	Is excited about doing things					
6	Avoids being in the place to do					
	an activity					
7	Likes to learn new which is					
	challenging					
8	Looks at the activity but does					

		[			
	not know that he/she has to				
	participate.				
9	watching the activity but does				
	not want to participate				
10	watching and participating by				
	sitting in his place				
11	participating with the				
	group(others)				
12					
	Can imitate others				
13	Can make a choice of his/her				
	activity				
14	Approaches the peer group for				
	help				
15	Respond to others instructions				
	other than the				
	facilitator(parent/familiar				
	person)				
16	calls out for his/her liking in-				
	between the session/situation				
17	Can take charge of anything				
	independently (without				
	prompts)				
18					
	good job/ well done				
19	Takes time to look back what is				
	done				
20	Prefers to finish the activity/				
_	take it to completion				
		1	1	1	1

	Ability to regulate relaxation	never	rarely	sometimes	frequently	always
	and tension					
1	Is able to accept change easily					
2	Is able to understand humor					
3	Can express likes and dislikes					
	(verbally/ non-verbally)					
4	Is able to identify the					

	tension/trigger			
5	Little problems or distractions			
	do not affect him			
6	Is ok if not heard when talking			
7	can listen till the other person			
	finishes talking			
8	Is comfortable if the choice is			
	made for him/her?			
9	Is able to receive the			
	information			
10	Is able to come up with			
	alternatives			
11	Should he be prepared before			
	introducing a change			
12	Is able to hear out to someone			
13	It does not bother when things			
	are not the way he / she wants			
14	Is able to call and talk if there			
	is a tension			
15	Is able to close eyes when in			
	tension			
16	Is able to disconnect with the			
	tension and shift to doing an			
	activity			
17	Is able to implement the			
	changed plan with ease			
18	brings in changes in the session			
	or routine with ease			
19	Can learn from previous			
	experiences			
20	Can use a prop(toy/ things) in			
	different ways			
21	Can engage in pretend play			

# The following questionnaire is based on articulation, grammar, spontaneity in use of words/speech; story telling.

	never	rarel	frequently	Most	always
ARTICULATION		У		often	
able to make sounds					
makes sounds with intonation					
makes sounds of all vowels					
Able to make sounds of all consonants					
Able to give relevant responses					
Able to listen					
Able to listen and understand					
Able to talk meaningfully to others					
Is clear to understand					
Can answer questions					
Can describe and explain					
Can ask questions to gain information					
Can initiate a conversation					
Able to talk in the context					
COMPREHENSION					
Able to understand the context					
Able to listen and understand but no					
response					
Able to understand simple instructions					
Able to imitate words					
SPONTANEITY IN USE OF WORDS					
Able to express his likes and dislikes					
immediately					
Can easily put words together into a					
sentence					
Can easily follow spoken directions					
Able to talk loudly					
Able to talk softly					
Stutters when speaking					
Takes time in finding words to express					

GRAMMAR			
understands simple words			
Able to talk simple words			
Able to talk in sentences			
Able to use prepositions appropriately			
Able to use verbs appropriately			
Able to use tense (past, present, future)			
appropriately			
Able to use pronouns appropriately			

### **APPENDIX-B**

ABT – tool for assessment- N	CD Scale
------------------------------	----------

CAPABILITY PARAMETERS	0	1
1. ACQUISITION OF LANGUAGE		
Vocalization (sounds) with intonation		
Basic vocabulary		
Simple sentences understood		
Understanding of simple questions		
Sound reasoning (interrelated sentences)		
Fluent speech		
2. ARTICULATION		
No grammatical lapses		
Spontaneous use of words		
Appropriate use of pronouns, prepositions and verbs		
Descriptive use of speech		
Loud reading with considerable ease		
Understands/ does quirks and fun in speech		
3. EXPRESSION AND MEANINGFULLNESS		
In context		
Personally meaningful		
Meaningful to others		
Spontaneous but expressive		
Consciously Symbolic		
4. STRUCTURING		
Vaguely structured		
Structure with beginning- and end		
Structure with beginning- middle and end		
Awareness of story structure		
A proper story constructed		
Story and deeply meaningful		
5. SILENCE AND LISTENING		
Silent when talked to (no response)		
Listens and understands, but no appropriate response		
Appropriate silence		
Reflectively silent		
Deep listening		
Meaningful listening and relevant responses		