



RHYTHM AND RHYME

- ONE STEP AT A TIME

A study on creating a buddy model using Arts Based Therapy as
a tool in working with children with ASD

**A PROJECT REPORT IN FULLFILLMENT OF
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ABSTRACT

The present study is an intervention based research on the use of Arts based Therapy in working with children with ASD. The intervention focused on the areas of group interaction, acquisition of language and meaningfulness of expression with the help of a buddy model. The group came together for the purpose of the intervention i.e., 35 sessions conducted over a period of 4 months. The group consisted of 6 children, 5 boys and 1 girl with ASD between the ages 9-12 years. The assessment tools used included 2 Ratings scales namely; The WCCL- Rating scale and the Narrative Capability Development Scale and 3 Observation formats assessing the domains of; Language and Articulation, Meaningfulness of expression and Interpersonal Interaction. Data was analyzed both quantitatively and qualitatively based on observations made by the facilitator and in some cases the parents of the children. Results obtained for the group on the above assessment tools were significant for all children in majority of the domains assessed. While all children showed improvement on the WCCL- Rating scale domains, individual children showed varying results in the areas of Narrative capability, Language, Meaningfulness of expression and Interpersonal Interaction. Overall results have been positive reasserting the benefits of using Arts Based therapy as an effective methodology in working with children with ASD.

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SECTION 2: INTRODUCTION

2.1. The Larger Problem:

Autism Spectrum Disorder (ASD) is a neurodevelopmental disorder that has been increasing in prevalence over the last few years. The identified group for this study is a fixed population of children between the ages of 7-12 years all of whom have been diagnosed with ASD. The term 'spectrum' refers to a wide range of symptoms, skills and impairment that children with this disorder can have. The condition is characterized by marked deficits in social functioning and communication among other behavioural challenges.

The children in this group are partially verbal. For many there is a lack of understanding or interest in speech and language. If speech is present, it is mostly echolalia or from rote memory. As a result these children find it difficult to express themselves or make themselves understood.

Some of the children display abnormal sensory responses that seem to stem from an inability to effectively utilize incoming information from all the senses. Hence these children exhibit repetitive behaviours as their way of dealing with excessive sensory stimulation.

All the children in the group have trouble engaging in social interactions. They tend to be content in their individual worlds and do not display a need to engage with others. They rarely make eye contact and are unable to pick up emotional cues or tone of voice.

It has been noted that the children in this group have the ability to cognitively gather information from their external environments, however they lack the ability to express this knowledge and are often disinterested in doing so.

2.2. Review of Literature of Creative Arts Therapies

This review of literature provides insight on using evidence based research for treating children with Autism using Arts based therapies, also called “expressive or creative arts therapy” in other parts of the world. The overall use of various art forms applied as therapy is a multi-modal approach wherein a therapist employs a range of art forms as integral to his/her practice.

Research about five art based therapies: Visual art; Music; Dance-movement; Drama and Play was investigated with respect to Autism spectrum disorders for evidence of outcomes.

With respect to Art therapy, i.e. Visual art, studies find that it can help increase communication, social skills, facilitate social integration, develop a sense of individuality and build relationships in children with autism. (Betts,2005). The expressive aspects of visual art, help autistic children communicate by providing an additional method for interpersonal interaction since communication does not mean merely the use of language but the totality of the communicative framework that appears from infancy onward (Evans & Dubowski, 2007).

Outcome studies by Evans & Dubowski et al show that long term Art therapy is effective in enhancing cognitive and emotional development, building relationships and lessening destructive behaviours in children with ASD.

There has been much research in the domain of Music therapy. In a comparative study, Kim et al (2008) examined the impact of improvisational music therapy on joint attention behaviours in pre-school children with autism. Results indicated that music therapy was more effective than play sessions in facilitating joint attention behaviours and non-verbal social communication skills in children.

Hayoung Audrey Lim (2007) found that Music training is as effective as speech training for acquisition of functional vocabulary and speech production in children with ASD; low functioning participants particularly showed a greater improvement after the music training compared to speech training.

With regards to the impact of music on neural pathways in the brain, studies suggest that music-based interventions would take advantage of the musical strengths in children with ASD and may help strengthen neural connections. Such treatments have important clinical potential in

facilitating expressive language in nonverbal children with autism (Wan,C.Y & Schlaug,G 2010).

Dance therapy is another area in which considerable research has been done. Movement is a universal means of communication and for autistic children whose communicative speech is underdeveloped, non verbal communication using movement and dance is an effective means of expression. Communication through movement helps a child become more aware of himself and interact with others ultimately aiding the development of relationships. (Chaiklin, and Lohn, 1993).

Leventhal (1981) states that dance movement therapy for the special child deals with sensory motor and perceptual motor integration ultimately building body image and the self concept. Body image appears to be lacking in children who are autistic. The development of which aids cognitive development and the acquisition of self help skills. The more defined one's body image, the better one is able to differentiate oneself from the environment and from others. This is necessary for the formation of relationships especially for children with ASD.

With regards to Dramatherapy, A study using theatrical interventions show potential promise in improving the socio-emotional functioning in children with ASD through the utilization of peers, video and behavioural modeling in a community based theatrical setting. (Corbett,B.A. et al 2011)

It is commonly accepted that play is crucial for development in all children. Play can be used as an effective tool to help children with ASD move beyond self absorption to shared interaction. Qualitative case study analysis found that Non-directive play may enhance and accelerate emotional/ social development of children with ASD, increase independence and empathy. (Josefi, O., Ryan, V, 2004)

2.3. Hypothesis:

Arts Based Therapy can be used as a primary intervention to work on group interaction and acquisition of language to create a buddy model among children with ASD across age groups, thereby allowing meaningfulness of expression.

SECTION 3: METHODS

3.1. Eligibility criteria for participants

The identified clients are a fixed population of children who have been coming to the centre for a year. For the purpose of this project children between the ages of 7-12 years have been selected. All of them have been diagnosed with ASD. The initial pilot project had 9 children of which initially 6 were identified as clients for the project. 3 of the identified children have moved out of the centre for the next year. Hence the other three who were a part of the pilot group will be included in this study.

Demographics of the group:

AGE	7-12years
GENDER	5 male and 1 female
BACKGROUND	All from middle class homes
OTHER RELEVANT INFO	All diagnosed with ASD

3.2. Logistics

Location: Snehadhara foundation

Setting: Well ventilated, spacious classroom with minimal furniture

Duration of study: Beginning May –End August,

Days and time of ABT sessions: Tues, Wednesday, Thursdays; 3pm-4pm

3.3. Data sources and data collection protocol

Sr.no	Data source	Description	Timelines	Observers
1.	Assessment form	Developed by WCCL foundation for assessment of Therapeutic domains: Body, Attention, Cognitive, Narrative capability, Expressive capability, Group interaction and their sub domains.	Pre and post (Pre- April/May ; Post: August end)	ABT facilitator
2.	Behaviour rating scales	Developed by WCCL foundation on the basis of the assessment form. It	Pre-post (Pre- April/May; post- August end)	ABT facilitator

		asses observable behaviours for each domain		
3.	SRS	WCCL developed format in which ABT practitioner records the plan and observations of each client and the group after every session	Before and after all 35 sessions	ABT facilitator
4.	Narrative capability development (NcD)	Observation rating scale that assesses the domains of Acquisition of language, Articulation, Expression and meaningfulness, structuring, Silence and listening	Pre- post	ABT facilitator
5. *	Observation Format – 1. a) Language and articulation b) Meaningfulness of non-verbal communication	Observation rating scales customized to the TG's of the group	Pre-post (Pre-May; post: August end)	ABT facilitator Parents
6. *	Observation Format – 2. Interpersonal interaction	Observation rating scales customized to the TG's of the	Pre-post (Pre-May; post: August end)	ABT facilitator Parents

		group		
7.	Comparisons of Drawings and paintings	ABT tool	Pre-post (pre-June; post-August end)	ABT facilitator
8.	Video Recording	Video recording at regular intervals to capture the child's responses to various artistic skills	Regular intervals	

* *Observation Formats attached in Appendix*

Protocols:

- Behaviour rating scale, Observation format 1 & 2 to be translated into quantitative data.
- Parents and neutral observers to be given a brief on the items included in the observation formats. Clarifications and explanations of item to be given if needed.

3.4 Methods used

All children in the given therapy group had common goals. The therapeutic goals for the group included interpersonal interaction with the help of a buddy system set up within the group and vocalization with the use of language.

The methods used to achieve these goals were diverse and many. The group explored the art forms together and in pairs. (Refer to SRS summary in Appendix for detailed session plans using the following methods.)

Buddy work: They were buddied in pairs on certain activities which involved sharing space and materials. They were also partnered to lead the way from one place to another (Terrace to therapy room etc) to establish by habit their responsibility for someone other than themselves. They walked together and sat together for visual art activities and held hands when the word “Partners” was called out. Though it took a while for each child to become aware of their partners a few of them within the group eventually took to the system over time.

Group work: The group as a whole worked together in each session. There was chaos in most of these session followed by order. The opening ritual had a large role to play in bringing the group together as they refused to stay together in the initial sessions. As the ritual evolved with song and dance and with the introduction of a “Name ritual” the group started to become more cohesive as names were learned by rote and rhyme. Once the group was able to sit together for longer periods of time they explored various art forms together adding their own individual flavor to the group with each session.

The Arts Based Therapy methods used to facilitate Buddy work and Group work were.

- **Voice, Song & Movement:** These were used by the group in every session as part of the opening ritual. A few sessions focusing on Dance and movement were included as well often with the use of props like puppets and scarves. The group responded the best to music and rhyme. Communications were sung accompanied by movement. The group came together and developed in dynamics by the common melodies they created.
- **Visual art:** The group explored various mediums of Visual art. They sometimes worked individually or in pairs sharing paper space and materials and otherwise worked as a whole group on a single large creation. They explored dry and wet media. They used tools like brushes, rollers, sponges and printing material when engaging with wet media. Some of the visual art creations done by the group were collage work, paintings using various tools, Zen painting, blow painting, marble art, etc.
- **Drumming and Rhythm:** The children enjoyed drumming together as a group and had a few common songs they associated with drumming. Frame drums, mallets and shakers were used by the group during drumming and music making sessions.
- **Games and exercise:** Games of various kinds were played by the group and in pairs. These were simple indoor games using props as well as outdoor games for gross body movement.

- **Meditation and chanting:** Quiet time was introduced to the group during closure to calm the group before they left the room. Soft music was played in the background for a few minutes at the end of every session. Simple chants like “OM” were also recited at the time of closure.

Visual art



Song and movement



Games and exercise



BUDDY WORK



GROUP WORK

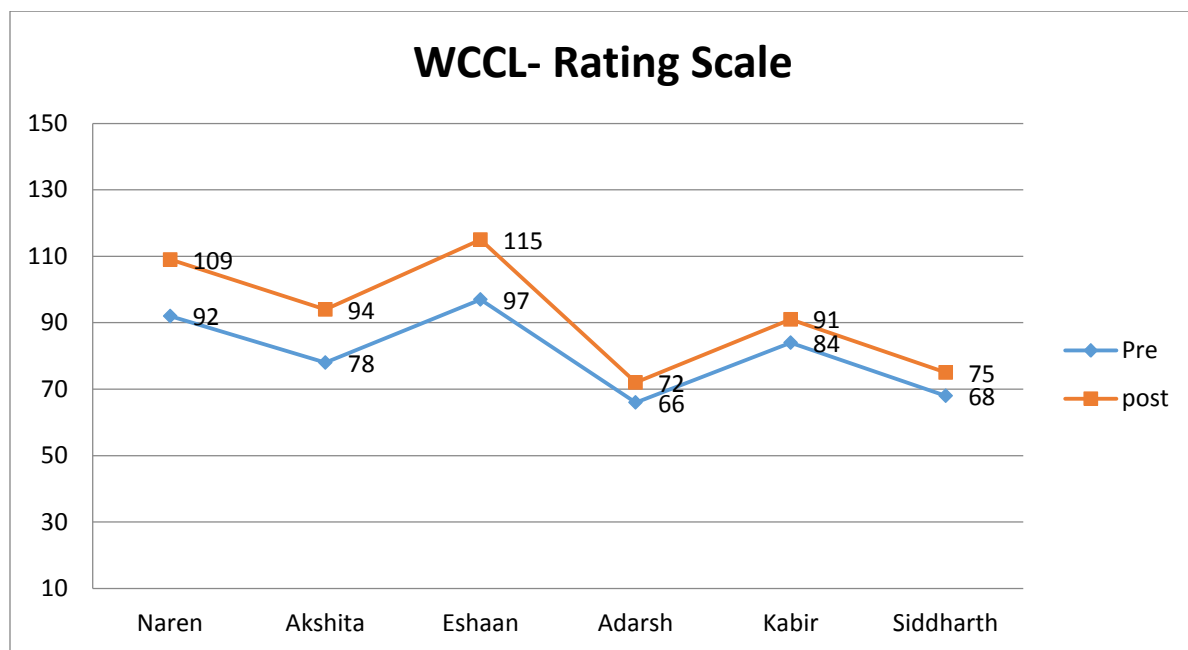


SECTION 4: RESULTS

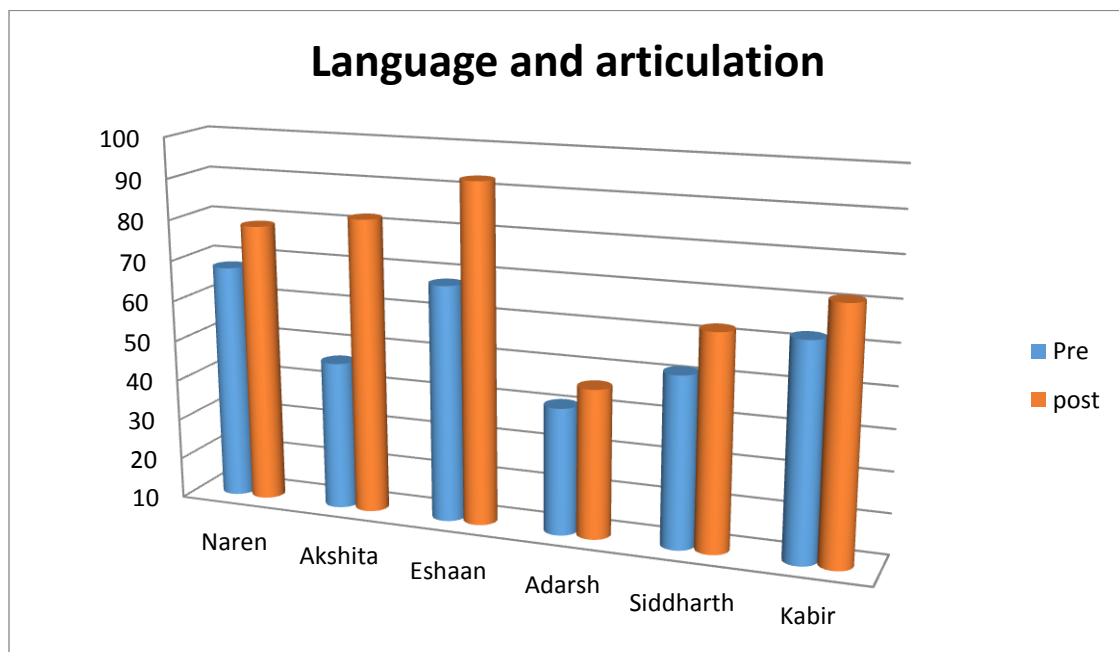
4.1. RESULTS SUMMARY

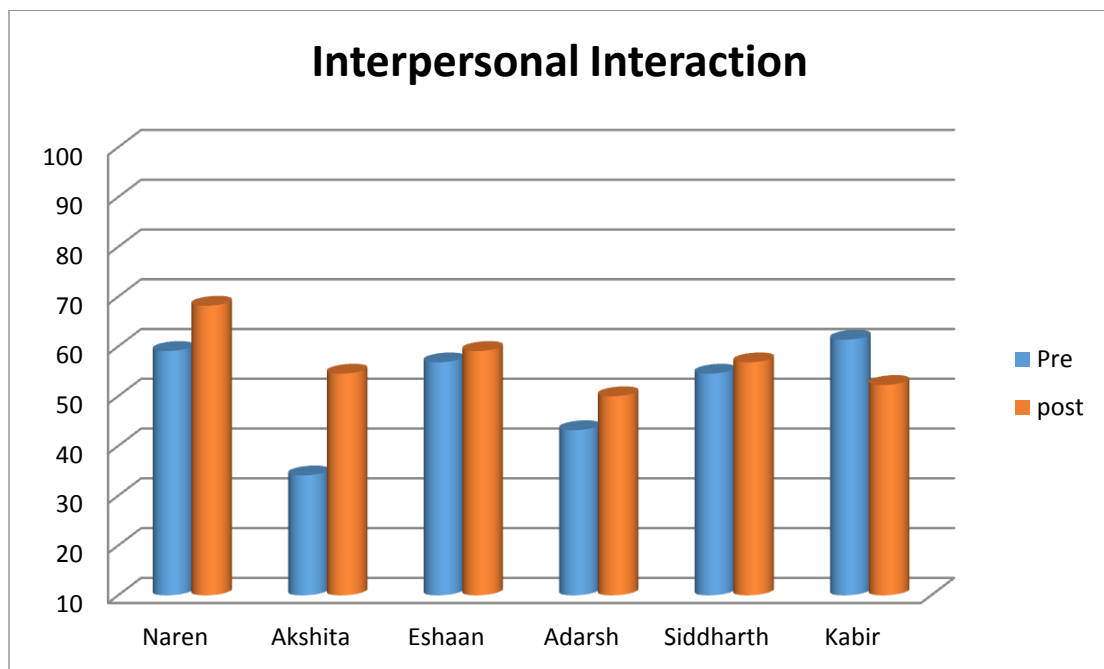
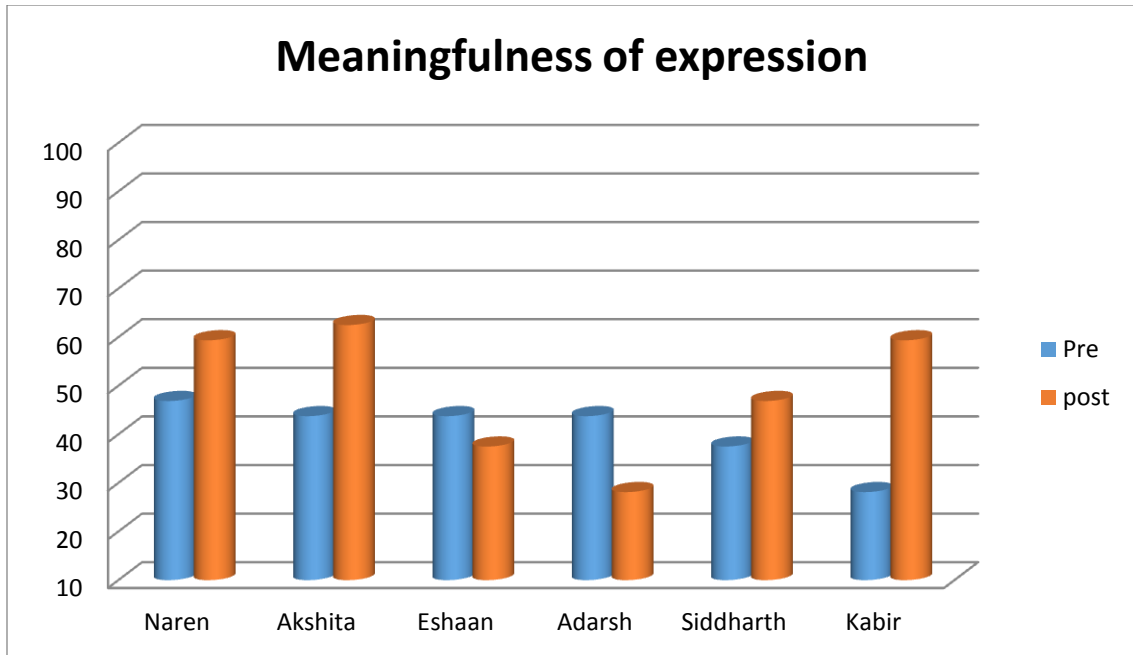
The group went through a 35 session Arts Based Therapy Intervention focusing on the areas of Group interaction, acquisition of language and developing a buddy system. The group as a whole showed some shifts in one or more of the above mentioned areas.

- Total scores on the WCCL- Rating Scale for each child was calculated before and after the intervention and are presented below as a summary. Post test results of total scores on the domains of Body, Attention, Cognitive, Narrative capability, Expressive capability, Group interaction indicate that all the clients have made some shifts in one of more of these areas. While shifts seen are significant in Naren, Akshita and Eshaan there are minor yet perceivable shifts seen in Adarsh, Kabir and Siddharth.



- Observation formats for Language and Articulation, Meaningfulness of expression and Interpersonal Interaction were collected pre and post (June and September) intervention. The results for the group as taken by the facilitator are presented below.





The results for Language and Articulation indicate a shift in all children. While the largest shifts are seen in Akshita and Eshaan, the group as a whole has shown some improvement in the area.

The results for Meaningfulness of expression indicate an improvement in four out of the six children. Eshaan and Adarsh show a decrease in Meaningfulness of expression as compared to the others in the group.

Interpersonal Interaction was a domain of main focus for this group. Results show that most children have made shifts in this area. While Kabir's results showed a decrease in interpersonal interaction all others have showed either minor or significant positive changes.

These results are supported by observations made in the therapy room the sessions progressed. When the group first came together they found it difficult to interact with each other or make their needs known. Singing instructions was the key to bringing the group together and keeping them involved. Slowly vocalization improved with the help of song and repetition of words and phrases commonly used. Children began to use familiar verbalizations to make their expressions meaningful. As vocalization improved so did interpersonal interactions more so between facilitator and child than peer to peer.

4.2. RESULTS DETAILED

AKSHITA ; Age: 9 years

Family background: Akshita is a single child. Her father works in the IT industry and mother is a home maker and special educator. She lives in a joint family with her grandparents.

Academic and rehab background: She is an active child. She prefers to be by herself in class room but often requires touch and tactile stimulation from the adults round her. She likes to be hugged and carried and demands it using gestures from time to time. She is verbal and able to repeat a few words from rote memory indicating wants. She loves music and sings to herself reciting most lyrics from memory. She does not stay in a group in the classroom and works better in a one on one scenario. Efforts are being made to include her in group activities. Akshita can throw tantrums when she does not get what she wants or when something she wants is taken away from her. She hits her head in anger and cries (sometimes pretending) during these tantrums. She is able to identify whom she can and cannot get her way with. She is very good with the computer and can read with ease. She lacks pincer grip pressure and hence cannot write but types on a key board. She has good symbol recognition and cognitive skills.

Medical Background: Akshita has been diagnosed with ASD. She has a history of convulsions and is on Anti- convulsants (Sodium Valporate). She has had five episodes till date, the last one in 2011.

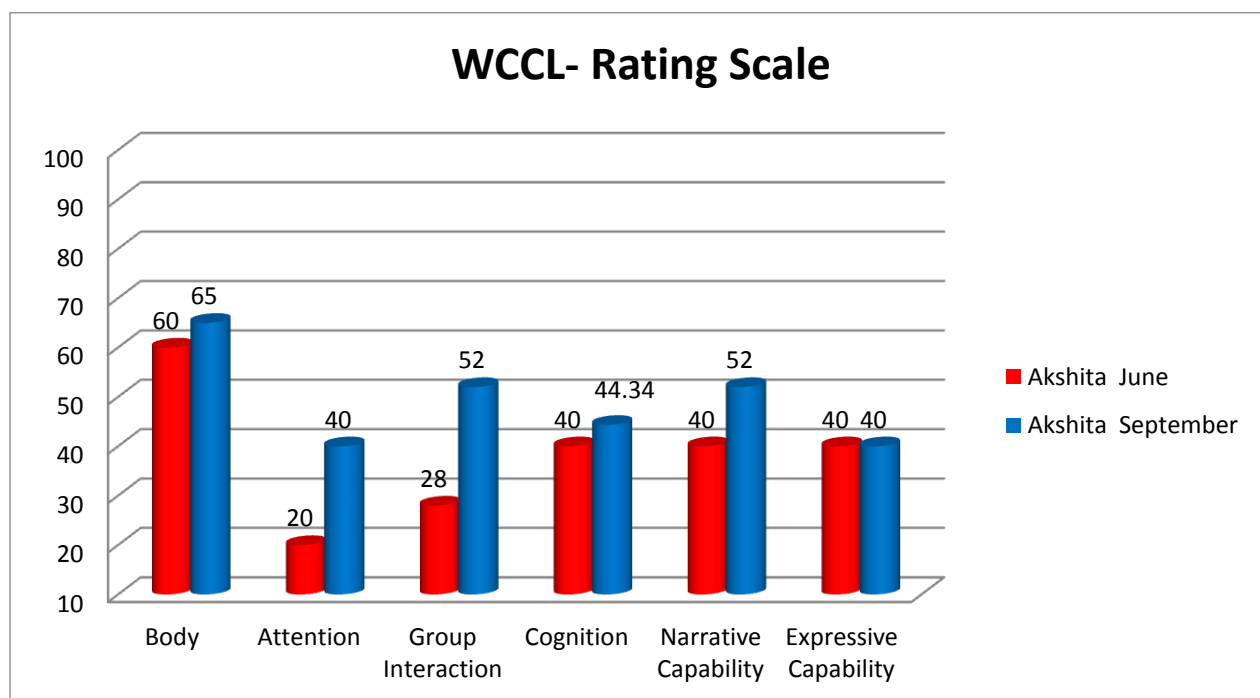
Child's strengths: Good reading ability, visual memory and rote learning.

Creation: Assessment domains and Therapeutic goals for Akshita in June 2014

- Levels of attention
- Group interaction: Impulse control
- Narrative capability : expressive communication

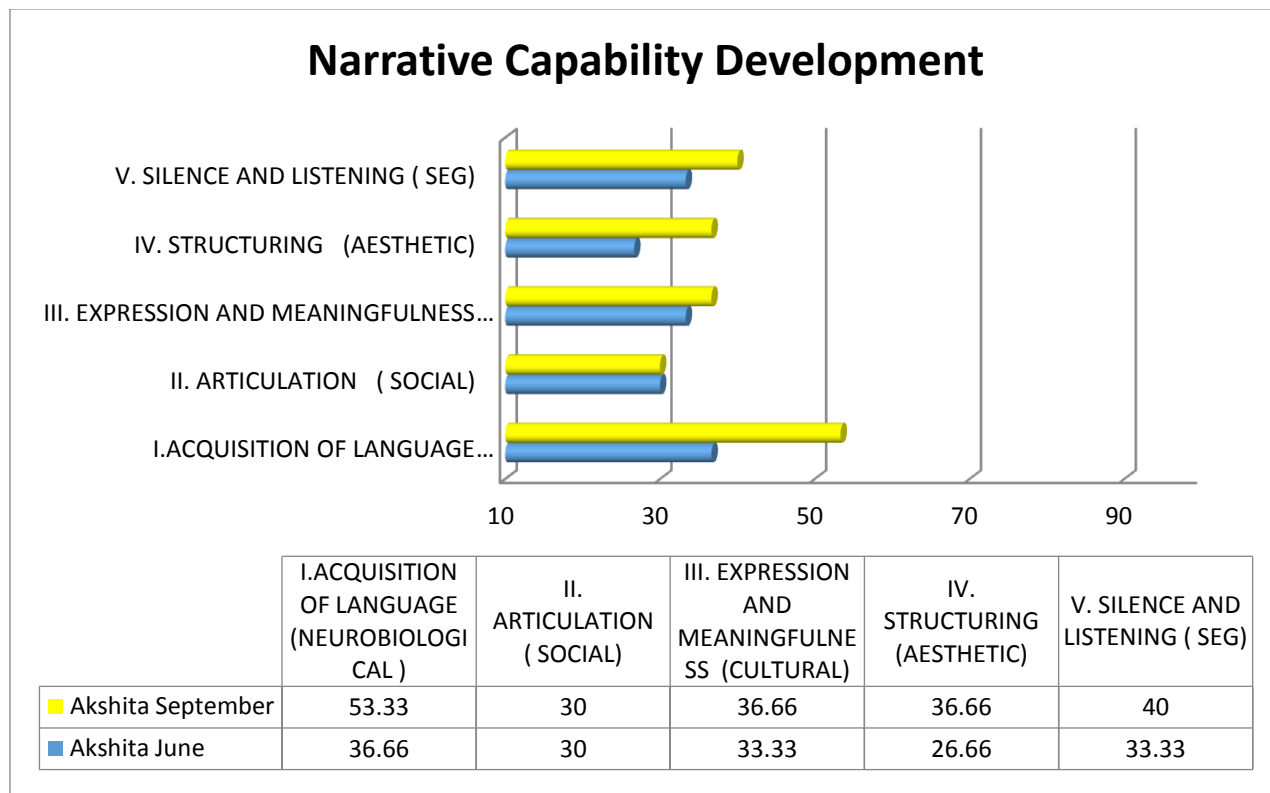
Akshita has shown improvement in all the above domains. When she first joined the group she preferred to wander around the class room singing to herself, resisting any participation in group activities. She was allowed to be by herself for several sessions until she finally joined the group when songs were used to carry out instructions for the opening ritual. Being a musical child she quickly picked up the rhythms and rhymes and eventually began to take initiative in leading the group through their warm up. Akshita now responds faster to instructions that initially fell on deaf ears. There are times when she strays away from the group but is prompt to return when called upon. Akshita resisted drumming but usually sang along to counts or the songs being sung. She rarely participated by hitting the drum but towards later drumming session stayed within the group through the session. Her resistance to group activities and visual art media was steadfast initially but she has come a long way and now remains in the group during most activities even though she herself may not engage with the materials. Her attention span and sitting tolerance is seen to have shifted along with the number of temper tantrums thrown.

Graph 5: Akshita's pre and post test ratings on the WCCL- Rating Scale



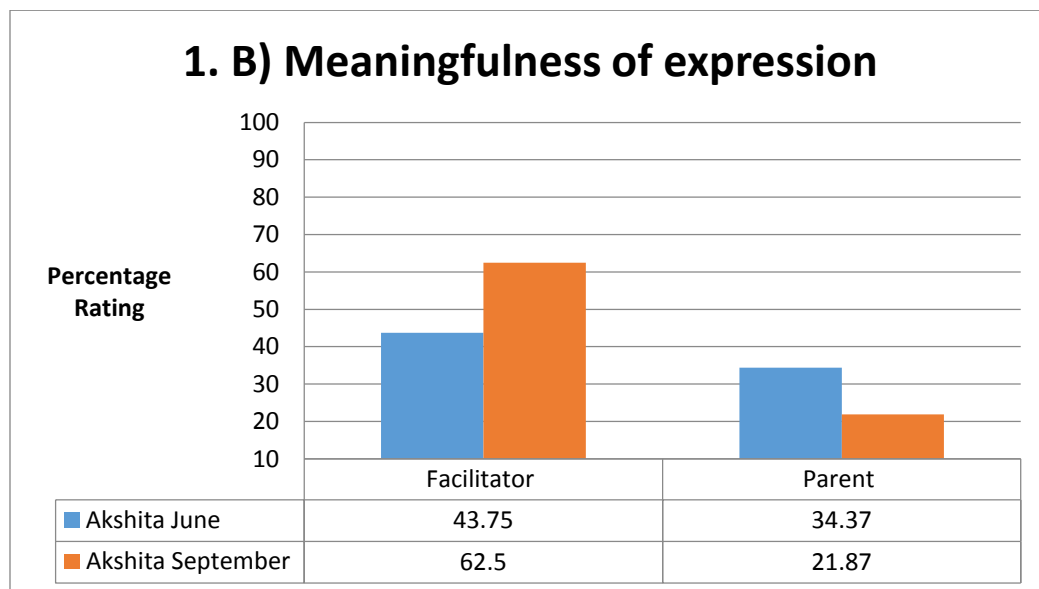
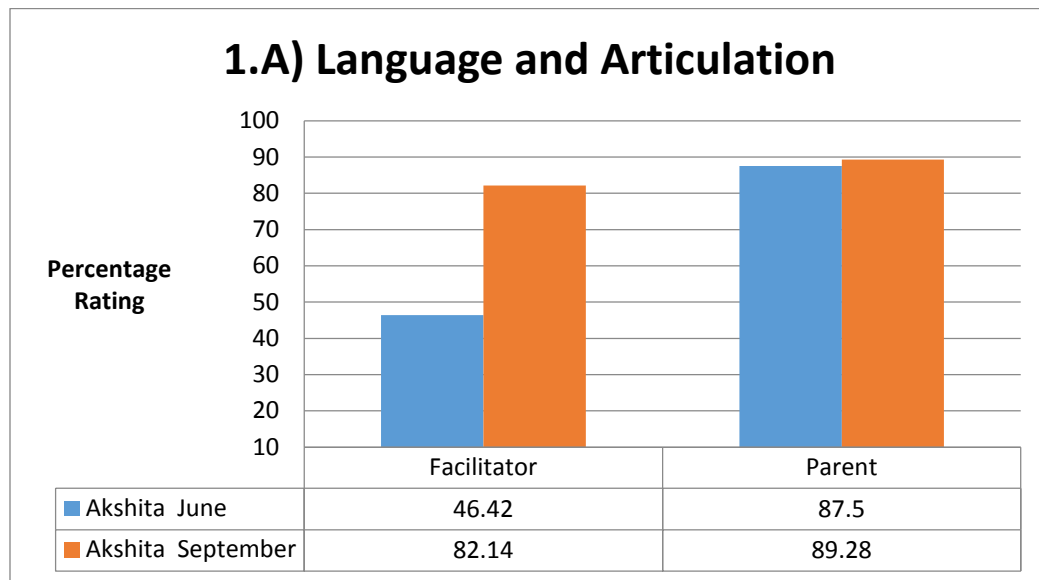
Akshita results indicate a significant change from June to September in 5 out of 6 domains on the WCCL- Rating scale. The largest shifts are seen in the Attention, Group interaction and narrative capability domains. There are small yet perceivable changes in the domains of Body and Cognition. Her expressive capability seems constant from June to September. These results resonate with observable changes seen in Akshita over the months in ABT sessions. Her attention and group interaction has increased considerably with an increase in taking initiative, leading and following. Though she is yet to interact directly with her peers, her responses to group instructions has increased and she is now aware of the others in the group. Although her expressive capability remains constant, her narrative capability has improved and this is seen in her ability to communicate simple wants using words.

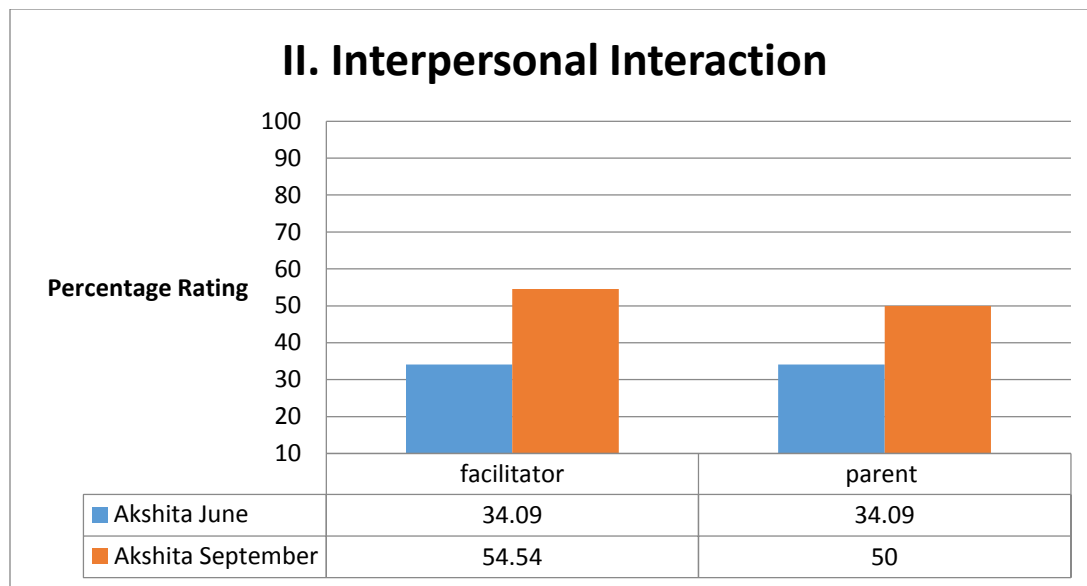
Graph 6: Akshita's pre and post ratings on the Narrative Capability Development scale



Each section on the NcD scale assesses larger domains of Neurobiological, Social, Cultural, Aesthetic and SEG. Akshita has shown positive shifts in all areas except Articulation. There has been considerable change in the Neurobiological domain of Acquisition of Language. It was noted however that Akshita did have an existing large vocabulary but preferred to mumble and remain incoherent in earlier ABT sessions. She began to use language more effectively only in later ABT sessions. While Articulation remains an area of work for Akshita there have been positive changes in the areas of 'Expression and meaningfulness', 'Structuring' and 'Silence and listening'. The results on this scale correlate with the results on the basic Narrative Capability domain of the WCCL- Rating scale.

Graph 7,8,9: Akshita's pre and post test rating on the following Observation formats as rated by her parents and ABT facilitator.





The three observations formats I a) Language and articulation I b) Meaningfulness of expression and II. Interpersonal Interaction were rated in June and September by the facilitator and the parents of the child. The graphs above represent the percentage ratings given by both the facilitator and the parents in June and September.

On Language and Articulation it was seen that Akshita used language a lot less in sessions than she did at home in June. Hence she possessed language and vocabulary before the intervention but began to use it effectively as the sessions progressed. The results on the post test taken by both the facilitator and the parent indicate positive changes since June which is supported by observations made during group interactions where Akshita has been more verbal than before.

On Meaningfulness of expression, Facilitator ratings show an increase since June while parent ratings show a marked decrease. It has been observed that Akshita has become more meaningful in expressing her wants, likes and dislikes during ABT sessions.

Akshita has made the most shifts in the domain of Interpersonal Interaction. This has been observed as sessions progressed and supported by the observation ratings given by both, the facilitator and the parent.

Comparisons of drawings and paintings:

Akshita resisted all visual art activities initially she preferred to wander around the room during visual art activities. As sessions progressed she voluntarily engaged with paint using a paint brush. Her paintings in July and September are presented below. Her paintings were a bit more large and messy In the beginning and later got smaller and more precise as her fine motor ability improved. In both cases she remains in the exploratory phase.

Before



After



NAREN; Age: 7 years

Family Background: Naren lives with his parents and younger brother of 10 years. They live as nuclear family. Naren has a good relationship with his brother. Both his parents work in their family business. They allow Naren to be himself.

Academic and rehab background: Naren is a cheerful boy. He is always happy and enjoys singing to himself. He does not resist coming to school but prefers to not participate in most activities when he is told to. He takes his own time and likes to do only those things that interest him. He does not interact much with other children but connects with a few adults and shows affection by hugging them. He communicates verbally using single words only when he wants something. He is able to understand instructions but many times does not follow them. He can read sight words and understand simple math and language concepts. He gets distracted easily and his sitting tolerance is being worked on and steadily improving. He can sit for up to 15 minutes when engaged with something that interests him. He is a musical child, enjoys playing the drums and sings melodiously. Social and communication deficits indicate that Naren is a child with Autism. He has been a part of the full day program at Snehadhara for the last year and a half. He is not undergoing any other treatment or therapy. He has been to a play group when he was younger. Occupational therapy and speech therapy for 6 months, a year ago

Medical background: He is diagnosed with ASD and is not under any medications.

Client's strengths: He is physically fit and energetic, always cheerful and loving. Has good motor skills, memory, ability to learn and curious.

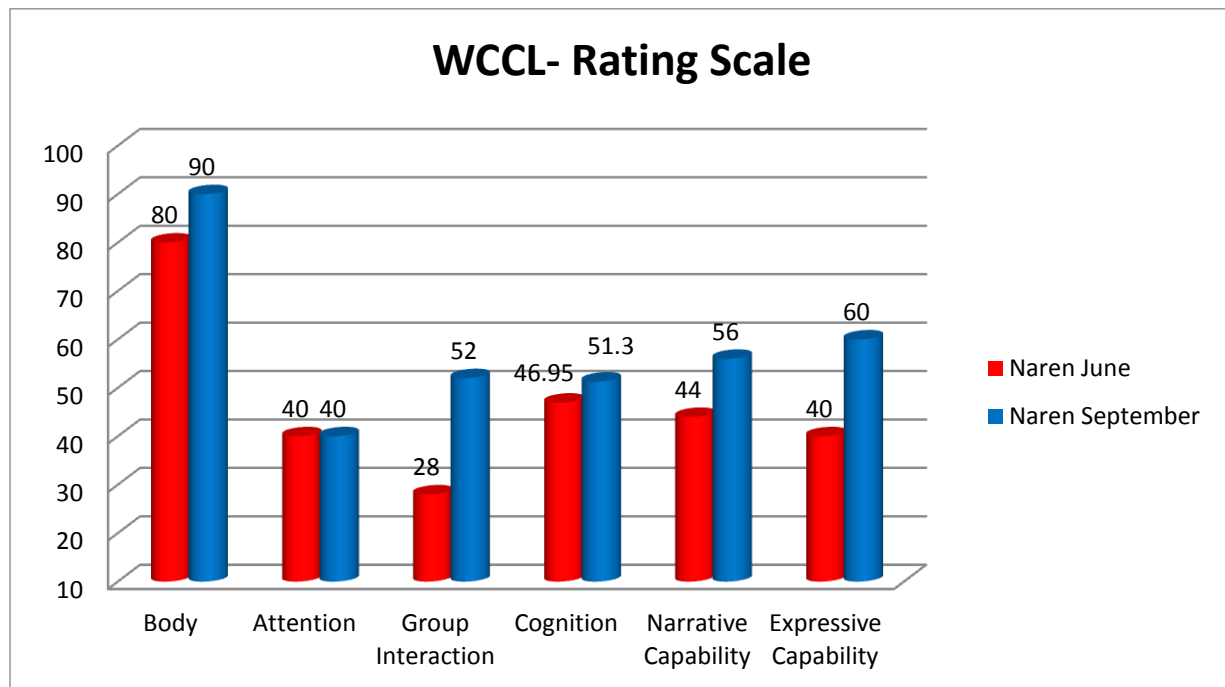
Creation: Assessment Domains and Therapeutic goals for Naren in June 2014

- Narrative capability : Use simple sentences to communicate
- Group interaction
- Attention: levels of attention, sitting tolerance, compliance

Naren has made many shifts over the months. His ability to vocalize his needs has increased and he is able to express himself better using song. There has been a difference in his engagement with material used during an activity, while earlier he resisted many activities involving art he now participates voluntarily for long periods of time. He thus stays in the group for longer and

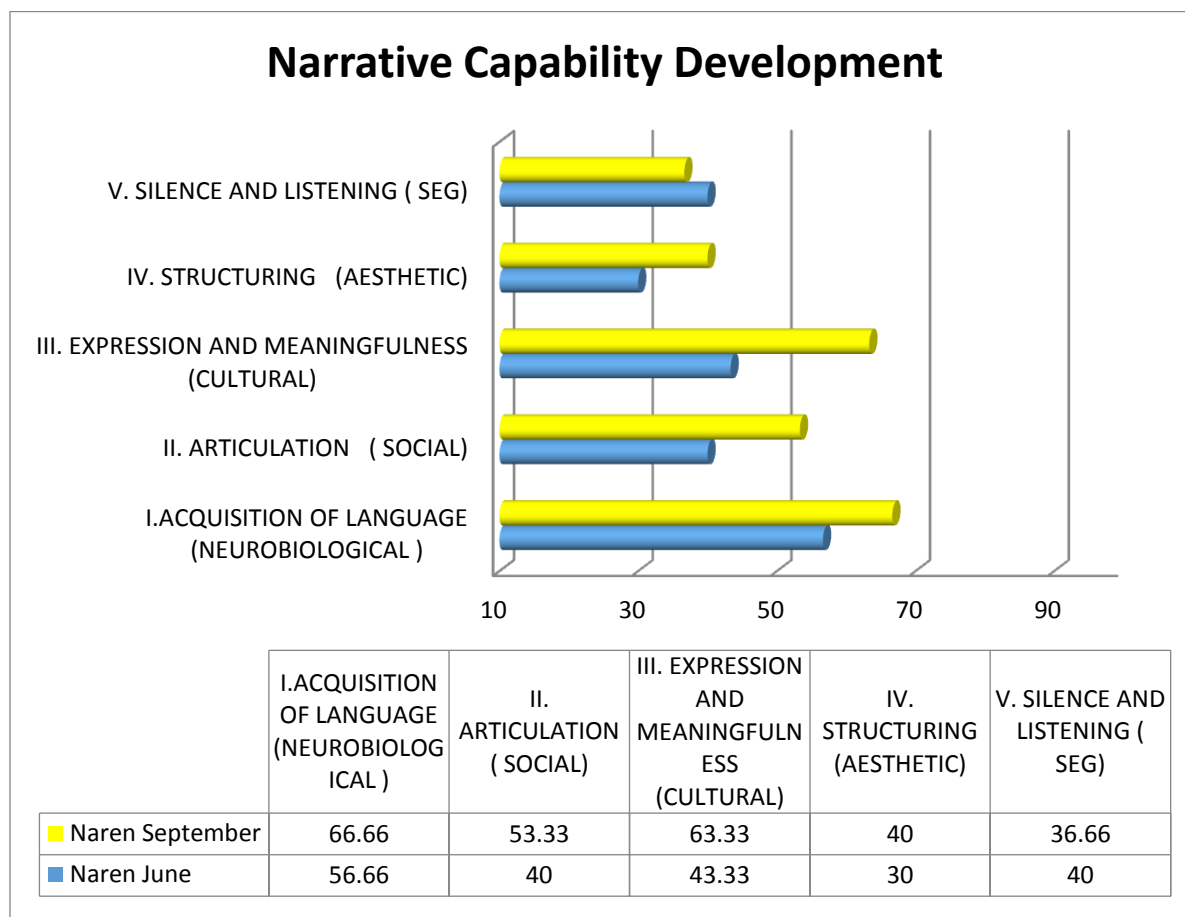
his compliance and sitting tolerance has increased considerably. Naren is a musical child much like his peers. The singing of group instructions is particularly enjoyable to him and he goes on to repeat all that he is doing using song. The rhyme and tune with which instructions are sung serves as a tool for him to narrate all that he is doing and he is quick to pick up new vocabulary if it is sung in context.

Graph 10: Naren's pre and post test ratings on the WCCL- Rating Scale



Naren has shown improvement in all the domains of the WCCL- Rating Scale. While results on Attention remain constant since June an improvement has been noted as sessions progressed. Naren has always been a physically active child and results show a 10% increase in the Body domain. The areas of Group Interaction, Narrative Capability and Expressive Capability have seen the most positive change in Naren as music and singing was introduced in all sections of the ABT sessions. The songs kept him interested in the group and provided him a tool for communication. This is seen in the post test results of June as well.

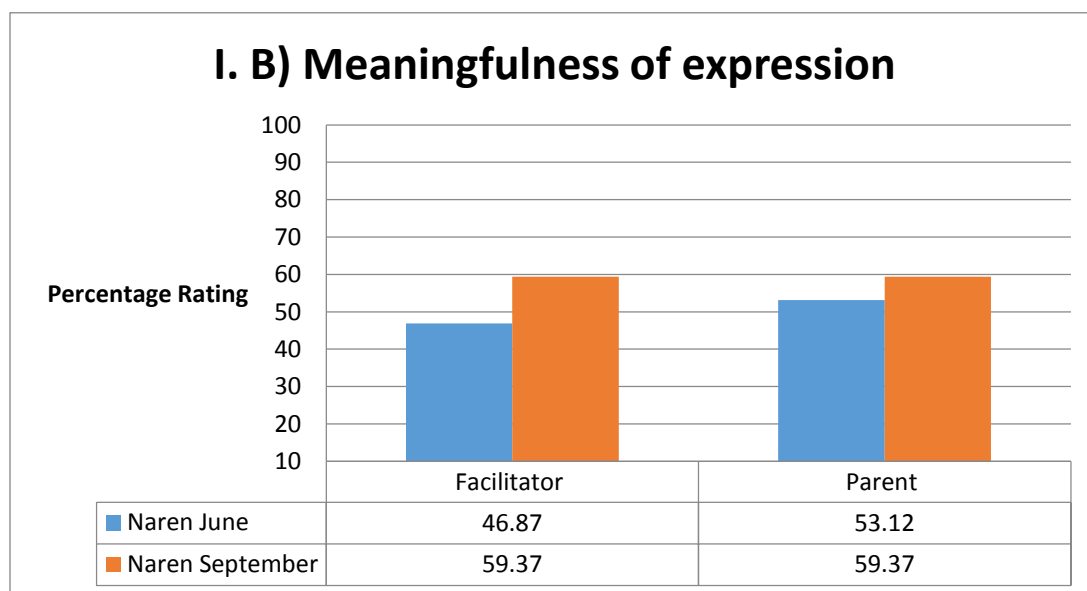
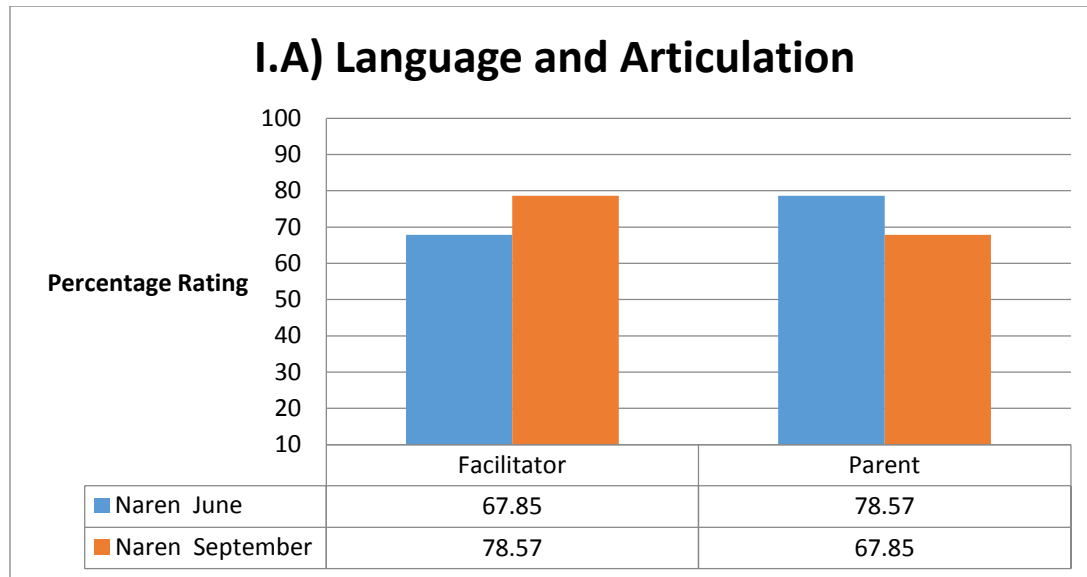
Graph 11: Naren's pre and post test ratings on the Narrative Capability Development scale

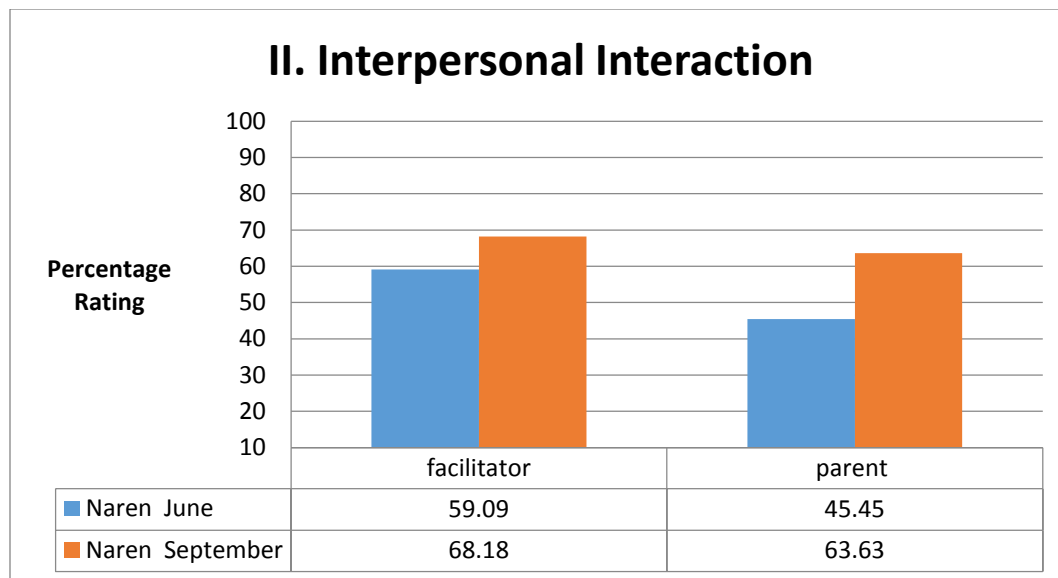


Naren has shown positive shifts in 4 out of 5 areas on the Narrative Capability Scale. There has been 10% and above improvement in the areas of Acquisition of Language, Articulation, Expression and meaningfulness and Structuring along Neurobiological, Social, Cultural and Esthetic domains. These shifts have been observed in sessions as well with Naren becoming more participative and articulate in his communications. On the SEG domain of Silence and listening there has been a downward trend. This too has been observed as Naren has become more vocal and is constantly singing during sessions. He does respond well to some meditation music however and remains quiet and contemplative for as long as 20 minutes.

The results on this scale corresponds to the results on the Narrative Capability domain on the WCCL- Rating Scale both indicating positive changes.

Graphs 12, 13,14 : Naren's pre and post test rating on the following Observation formats as rated by his parents and ABT facilitator





The three observations formats I a) Language and articulation I b) Meaningfulness of expression and II. Interpersonal Interaction were rated in June and September by the facilitator and the parents of the child. The graphs above represent the percentage ratings given by both the facilitator and the parents in June and September.

On the domain of ‘Language and articulation’ the facilitator scores are the inverse of his parent scores for June and September. Observations made during ABT sessions indicate a definite positive shift in his use of Language and Articulation from June to September. It seems the inverse is taking place at home, however there could be many reasons for the results obtained. Facilitator scores also correspond to the scores on the areas of ‘Acquisition of language’ and ‘Articulation’ in the Narrative Capability Development Scale which show a positive shift as well.

On the domain of ‘Meaningfulness of Expression’ it is interesting to note that pre and post scores of the Facilitator and the parent are close to identical. Naren’s expression seems to have become more meaningful since June both in sessions and at home. Results on the ‘Cultural’ domain of ‘Expression and Meaningfulness’ in the Narrative Capability Scale correlate with these results.

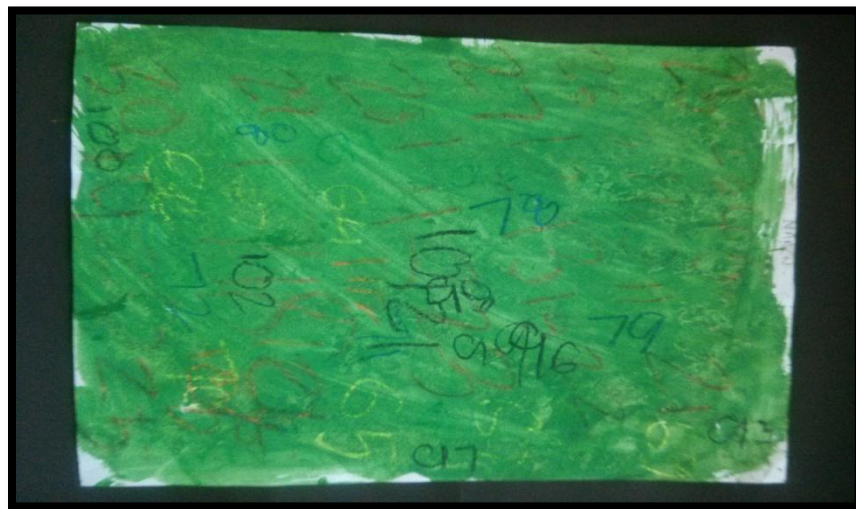
On the domain of ‘Interpersonal Interaction’ Naren has made significant progress. This is seen in sessions as well as at home as indicated by parent ratings. Facilitator and parent ratings are again very similar for this domain and Naren seems to be more interactive than in June. It has been observed that Naren interacts with a few people remembering a word, a song or a phrase that best represents them. His interaction with these people involves him recalling and reciting the phrase

or song that he associates with them. This results on this observation format correlate with the results found on the 'Group interaction' domain of the WCCL- Rating scale and resonate with that which was observed during sessions.

Comparisons of Drawings and Paintings

Naren had a tendency to resist wet media however as sessions progressed he began to get more and more interested in painting. From initial prompting he began to engage with visual art media voluntarily. His paintings from June and September are presented below. Naren initially covered the whole age with paint and was fond of writing numbers on all his art work. He later began to use the brush more efficiently and his strokes became more defined and simple. This is seen in the pictures below. He also enjoyed zen painting the most.

June



September



ESHAAN; Age: 8 years

Family background: He lives in a nuclear family with his parents and younger brother who is one year old. His father is a successful businessman and mother is a home-maker.

Academic and rehab background: Eshaan is a happy child, verbal and hyperactive at times. He communicates by repeating certain words. He has a short attention span and little sitting tolerance. He interacts well with adults and is affectionate but tends to hit and pinch when excited. He responds well to instructions in a group but doesn't interact much with his peers unless it is to hit and pinch them. He interacts well with adults and responds to them. He has been coming to the centre for more than a year and has improved in attention span and is able to express himself a little better than when he was younger. He has been to play school and Occupational therapy in the past.

Medical background: He is diagnosed with Autism and is not under any medication.

Special Care instructions (if any) relevant stressors, any other precautions whilst playing:
Pinches or hits when excited or agitated.

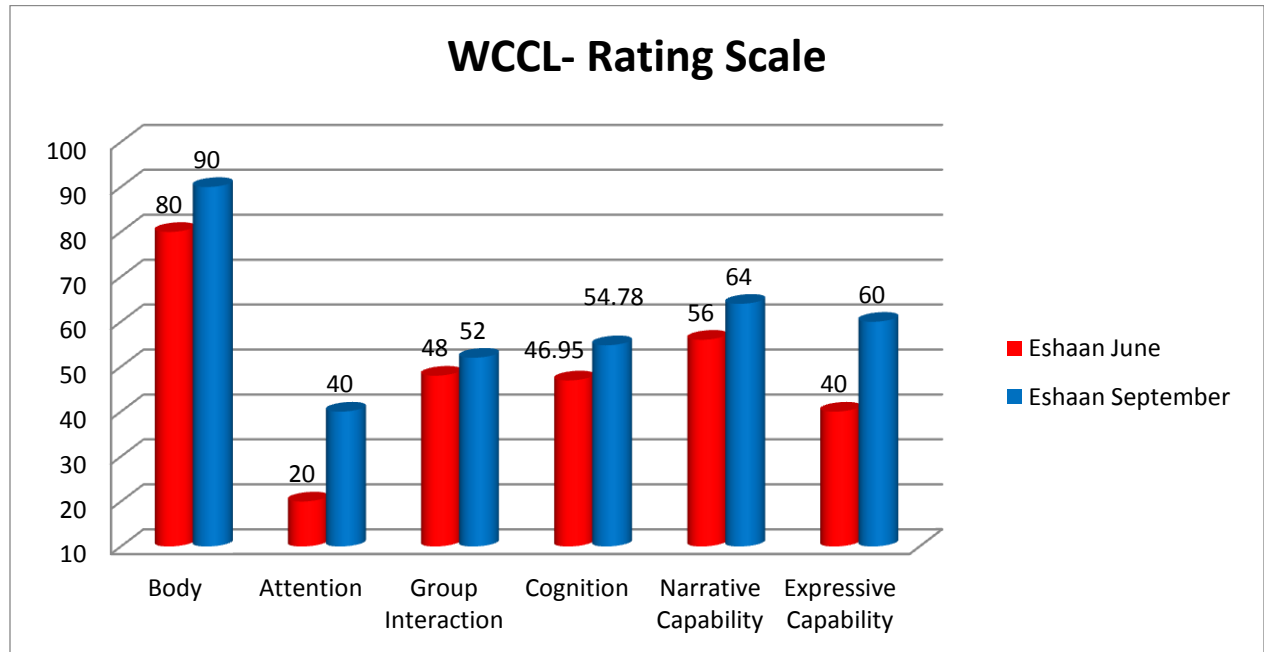
Client's strengths: Is a happy child, responds well when spoken to and is able to comprehend language and instruction.

Creation: Assessment domains and Therapeutic goals for Eshaan in June 2014

- Group interaction : Sharing, impulse control
- Narrative capability: communication using simple sentences and descriptive speech
- Attention : Levels of attention, sitting tolerance

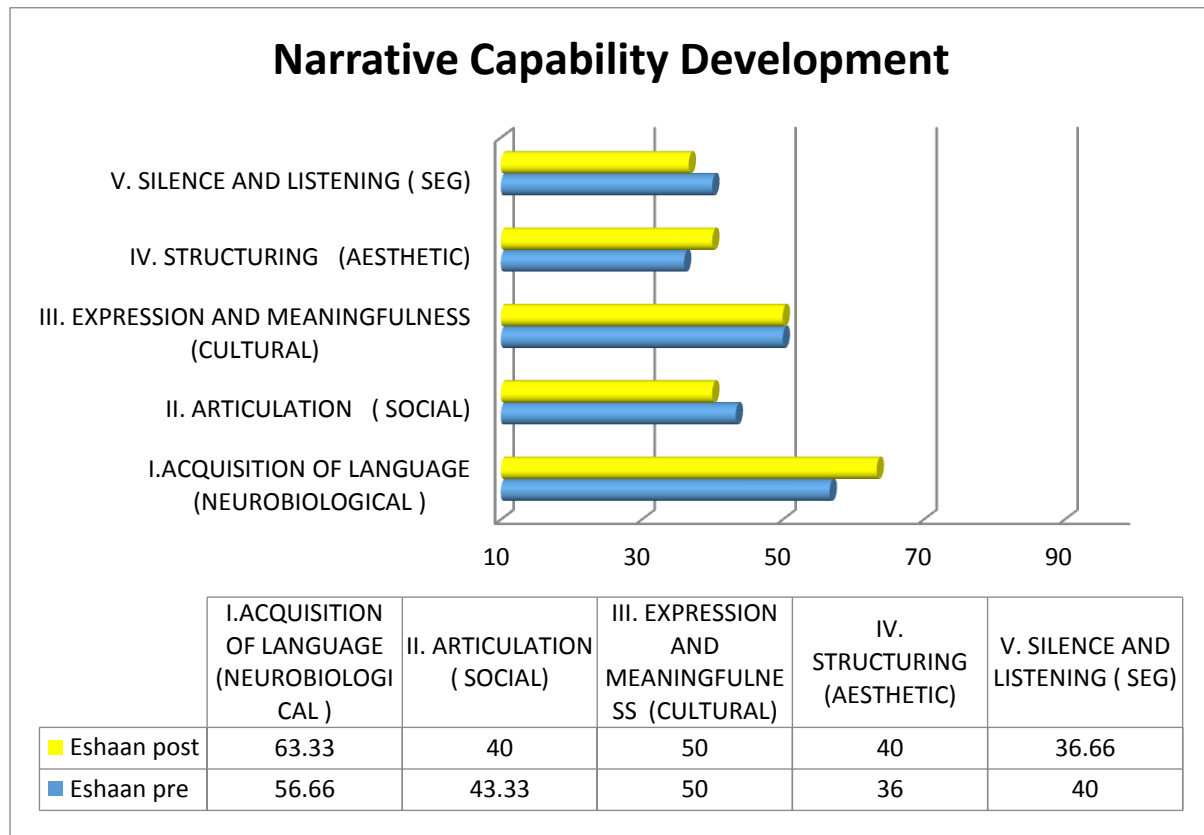
Eshaan responded well to group sessions and showed more interaction with his peers as sessions progressed. He was the most active in the group, responding well to group instructions and participating without much prompting especially during visual art and drumming sessions. He too like his peers is a musical child and picked up the group songs almost instantly often taking the lead in the opening ritual or warm up. Shifts in attention, sitting tolerance and his ability to communicate have been observed over the months in ABT sessions. His impulse to pinch and bite however still remains an area to be worked on.

Graph 15: Eshaan's pre and post test rating on the WCCL- Rating Scale



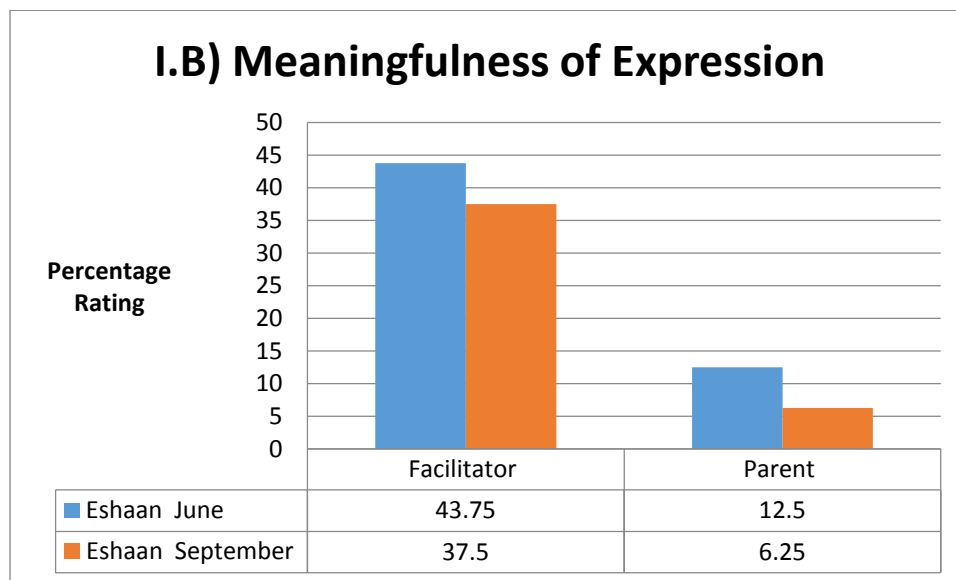
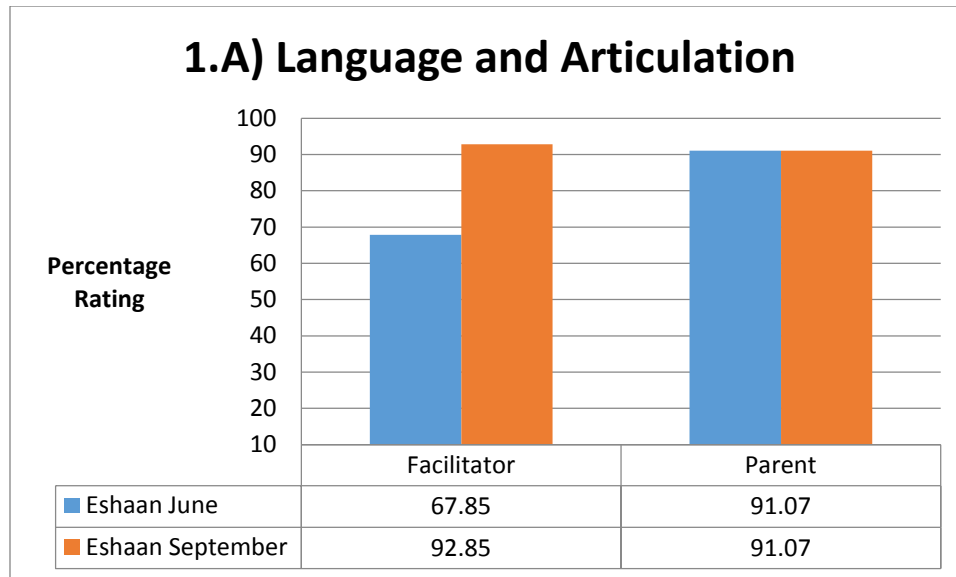
Eshaan's results indicate some positive change in all areas on the WCCL- Rating Scale. There has been a clear shift in the domain of Attention. This has been observed in sessions especially those involving visual art media. Eshaan's expressive communications have seemingly improved since sessions conducted in June. He is able to clearly express his wants using single words and/or gestures. Results on the domains of 'Narrative Capability' and 'Expressive Capability' indicate the same.

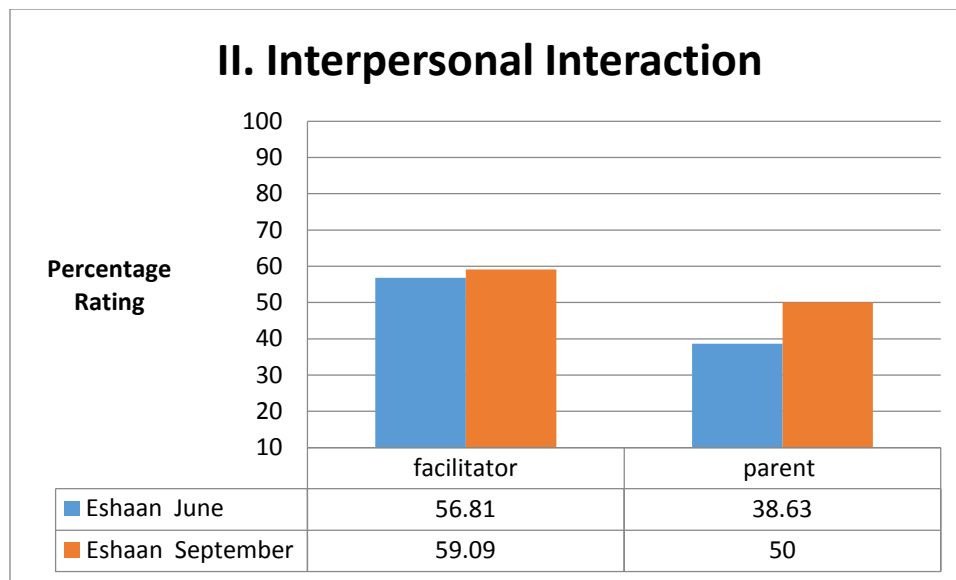
Graph 16: Eshaan's pre and post test ratings on the Narrative Capability Development Scale



Eshaan's ratings on the Narrative Capability Scale indicate minor changes if any on 4 out of 5 domains. There has been no change in the domain of 'Expression and Meaningfulness' and little positive change in 'Structuring' and 'Silence & Listening'. 'Articulation' shows a negative change while results on 'Acquisition of language' indicate that most improvement has taken place in this domain. It has been observed in sessions from June to September that Eshaan's communication and narrative capability has remained mostly constant with a few improvements in his ability to express wants using words. There has been no major change in this area as Eshaan is a verbal child with an ability to pick up new words and phrases and use them when required. He is yet to construct whole sentences but is able to make his wants known and recently with increasing clarity.

Graph 17: Eshaan's pre and post test rating on the following Observation formats as rated by his parents and ABT facilitator





The three observations formats I a) Language and articulation I b) Meaningfulness of expression and II. Interpersonal Interaction were rated in June and September by the facilitator and the parents of the child. The graphs above represent the percentage ratings given by both the facilitator and the parents in June and September.

On the domain of 'Language and Articulation' Eshaan has shown some shift according to the scores of the facilitator but not the parent. A slight improvement in Eshaan's articulation has been noticed in ABT session so has his use of vocabulary increased when song is used a means to communicate.

On the domain of 'Meaningfulness of Expression', which involves the use of gestures and non verbal responses to communicate, Eshaan has shown a negative rating given both by facilitator and the parent. This maybe because Eshaan is more verbal and prefers to use words. The extent of gestures used by Eshaan is to lead one towards something that he wants or point to it. He otherwise shakes his hands and body often expressing anxiety and excitement not always in meaningful ways.

On the domain of 'Interpersonal Interaction', Eshaan has shown some positive improvement has rated by the parent and facilitator. This is seen in group sessions especially drumming where Eshaan often takes the lead. He is yet to interact meaningfully with his peers but now knows all their names and is able to all them out during session rituals.

Comparison of Drawings and paintings

Eshaan enjoys Visual art sessions the most. He gets immersed in the process and loves paint. He paints his hands and legs and initially almost always used his fingers to paint. As sessions progressed he began to use a brush and explore other painting tools. His paintings in June and September do not show much difference he continues to enjoy the medium and express himself as he wishes.

Before



September



ADARSH; Age: 11 years

Family background: Adarsh is a single child to working parents. They live in a nuclear family with his grandparents visiting often.

Academic and rehab background: Adarsh is a quiet child. He has been in a special group since he was 4 years old. He has been in both one on one and group therapies in the past. He is able to copy write numbers and alphabets and can count to an extent. He is verbal and responds using single words learnt by rote or by repetition. He requires physical touch and affection quite often and asks for it using gestures. When upset or agitated he screams loudly and cries uncontrollably even when pacified. The reasons for his agitation are unknown and do not follow any particular triggers. These episodes of unease last a few hours before he calms down. He does not interact with other children or participate in group activities. He is undergoing ABA therapy as well. He has been exposed to yoga, horse riding, swimming and skating.

Medical background: Adarsh is diagnosed PDD- NOS in ASD. He is not under medication.

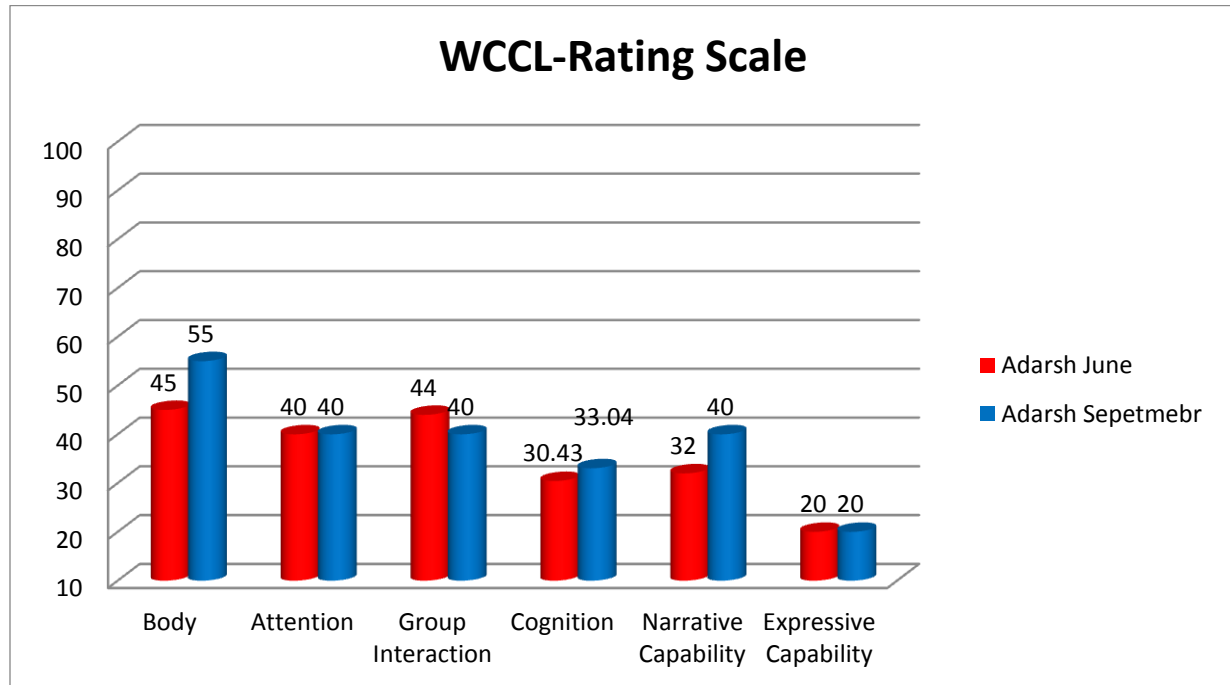
Child's strengths: Compliance, sitting tolerance, responsiveness to instruction

Creation: Assessment domains and Therapeutic goals for Adarsh in June 2014.

- Group interaction: Impulse control
- Narrative capability: Expressive communication

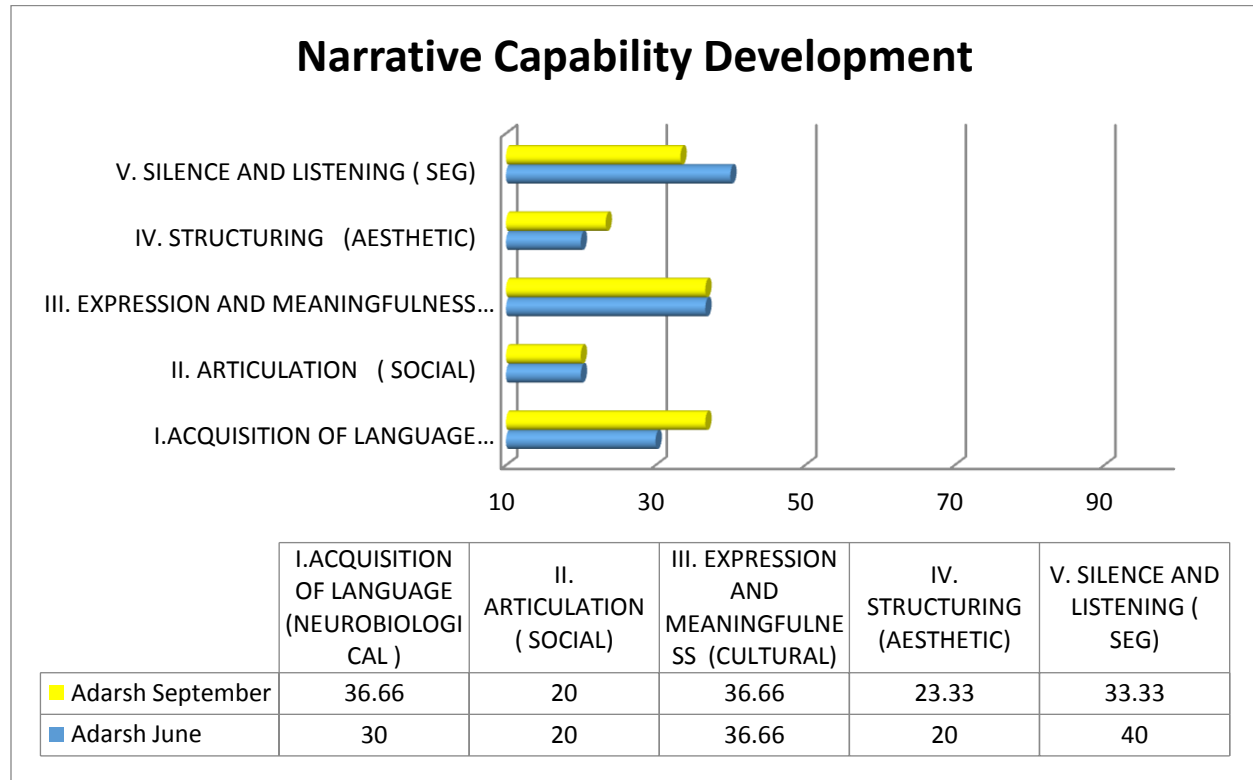
There have been subtle changes in Adarsh over the months. He is a passive, quiet and loving child however there were times when he would have frequent episodes of anxiety outbursts during which he would scream and cry uncontrollably and would take as long as an hour to calm down. A big change seen in Adarsh is a drastic reduction in these episodes. While his group interaction and Narrative capabilities remain more or less constant over period of the intervention his anxiety impulses have reduced. He is a calm and happy member of the group who participates only when prompted. It has been observed that his responsiveness to instruction has become quicker but his motivation and passiveness remain unchanged in group sessions. He remains compliant none the less and engages in activities when prompted or given individual support. He is yet to voluntarily engage in any art form with interest or excitement and prefers to stay content in his world watching all that is going on around him.

Graph 18: Adarsh's pre and post test results on the WCCL- Rating Scale.



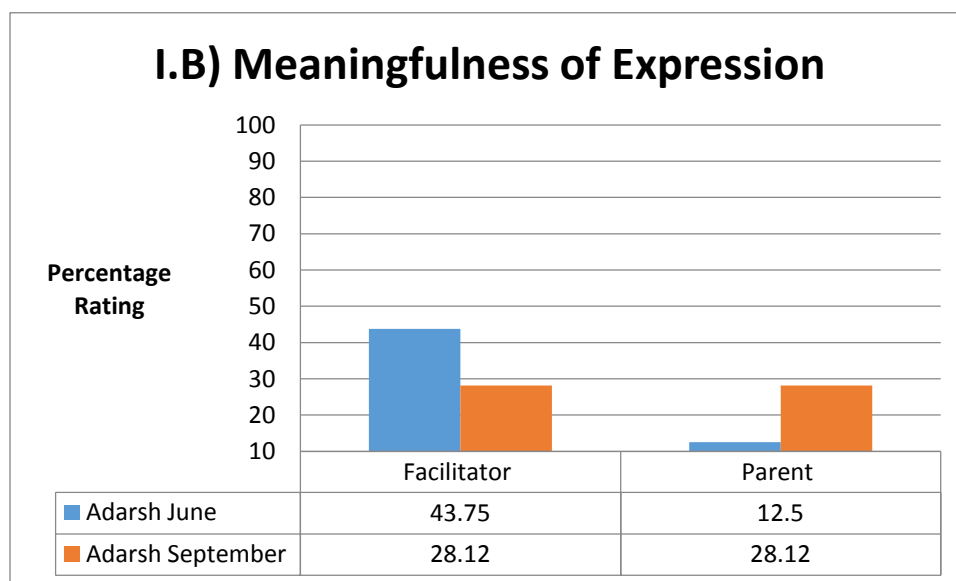
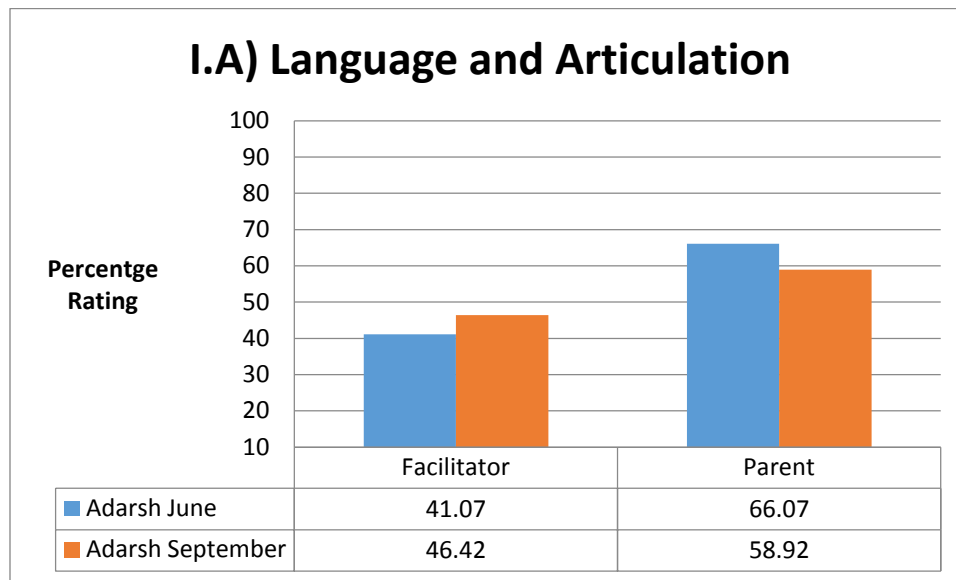
Adarsh's scores on the WCCL- Rating Scale reflect the subtle changes seen in him during sessions. While scores on the domains of 'Attention' and 'Expressive Capability' remain constant in the pre and post test there has been some shift in the domains of 'Body', 'Cognition' and 'Narrative Capability'. There seems to be a decrease in "Group Interaction" which may be because Adarsh's attendance began to drop in the months of August and September thereby effecting his dynamics with the group.

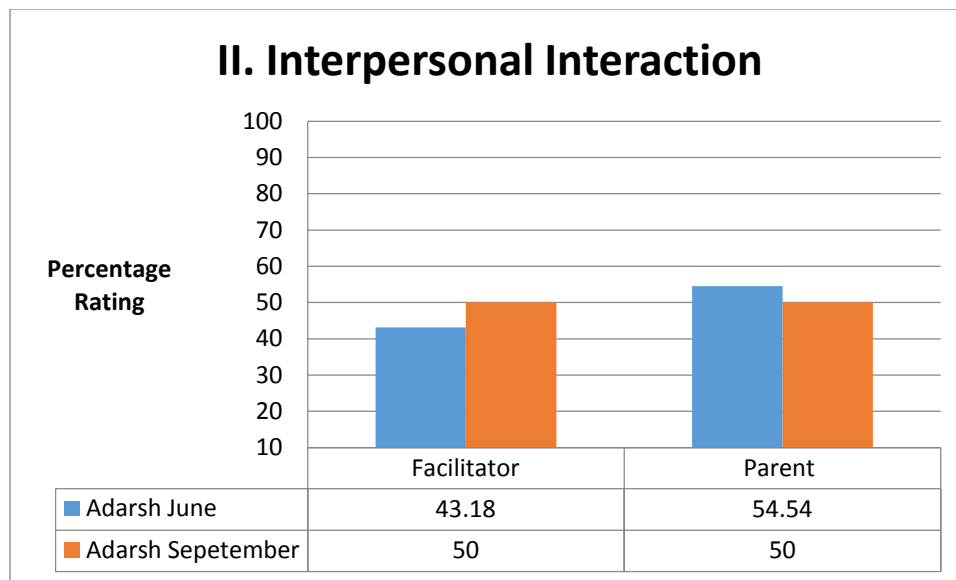
Graph 19: Adarsh's results on the Narrative Capability Development Scale.



Adarsh's results on the Narrative Capability Development Scale have been more or less constant with minor positive shifts in some areas. Adarsh is able to understand and respond to language using sounds and words of his own. He has trouble articulating or formulating sentences but is able to make his basic needs known using single words like 'toilet', 'water' etc. It has been observed that the number of words used to express himself have increased to a few more, this is reflected in his scores on 'Acquisition of Language' and 'Structuring'. There has however been a decrease in 'Silence and Listening' which has not been particularly observed in sessions.

Graph 20, 21, 22: Adarsh's pre and post test rating on the following Observation formats as rated by his parents and ABT facilitator





The three observations formats I a) Language and articulation I b) Meaningfulness of expression and II. Interpersonal Interaction were rated in June and September by the facilitator and the parents of the child. The graphs above represent the percentage ratings given by both the facilitator and the parents in June and September.

On the domain of 'Language and Articulation', Facilitator scores indicate a slight increase in use of language while parent scores indicate a decrease. Adarsh's use of language involves the use of some words to indicate needs this domain, in sessions it has been observed that this limited use of language has become a more frequent than before.

The domain of 'Meaningfulness of Expression' focuses on the use of gestures for communication. Pre test scores given by the facilitator indicate that Adarsh used more gestures to communicate meaningfully in June than in September. The post test scores of both the parent and facilitator remain close to identical. While the parent results indicate a positive change in meaningfulness of expression a downward trend has been observed by the facilitator in sessions. These reason for these varied results may be due to discrepancies in post test ratings of the facilitator as Adarsh's attendance began to drop towards the end of the intervention.

On the domain of 'Interpersonal Interaction', a positive change has been noted by the facilitator while a minor decrease has been noted by the parent. With a reduction in Adarsh's anxiety outbursts, his interpersonal interactions have become more meaningful as observed in sessions.

Comparisons of Drawings and paintings

Adarsh resisted paints and other drawing media for a long time even when prompted. This is seen in the first picture in June where a the sheet remained mostly white with a few specs of paint that was blown using a straw which Adarsh did with help. He later slowly began to engage with Visual art media by himself and is still in the exploratory phase.

June



September



SIDDHARTH; Age: 12 years

Family Background: Siddharth is a single child of working parents.

Academic and rehab background: He is a responsive verbal child who communicates with single words and short sentences he has learnt by rote. Siddharth displays behaviours of jumping and moving his hands especially when happy or agitated. He experiences sudden bouts of anxiety that cause him to react in aggression until he calms down. He is not otherwise violent or self destructive. Siddharth is able to respond to questions and instructions and comprehends language to an extent. He does not interact with other children and prefers to work by himself. He engages well with materials but tends to throw them around when agitated or not interested. He had good motor skills , symbol recognition and memory. He is a good swimmer and has participated in many competitions in the past.

Medical background: He is diagnosed with Autism and is not under medication.

Special Care instructions (if any) relevant stressors, any other precautions whilst playing:

Can suddenly react with aggression and get upset without prominent stressors or reasons. He must be dealt with calmly instead of aggressively in such situations.

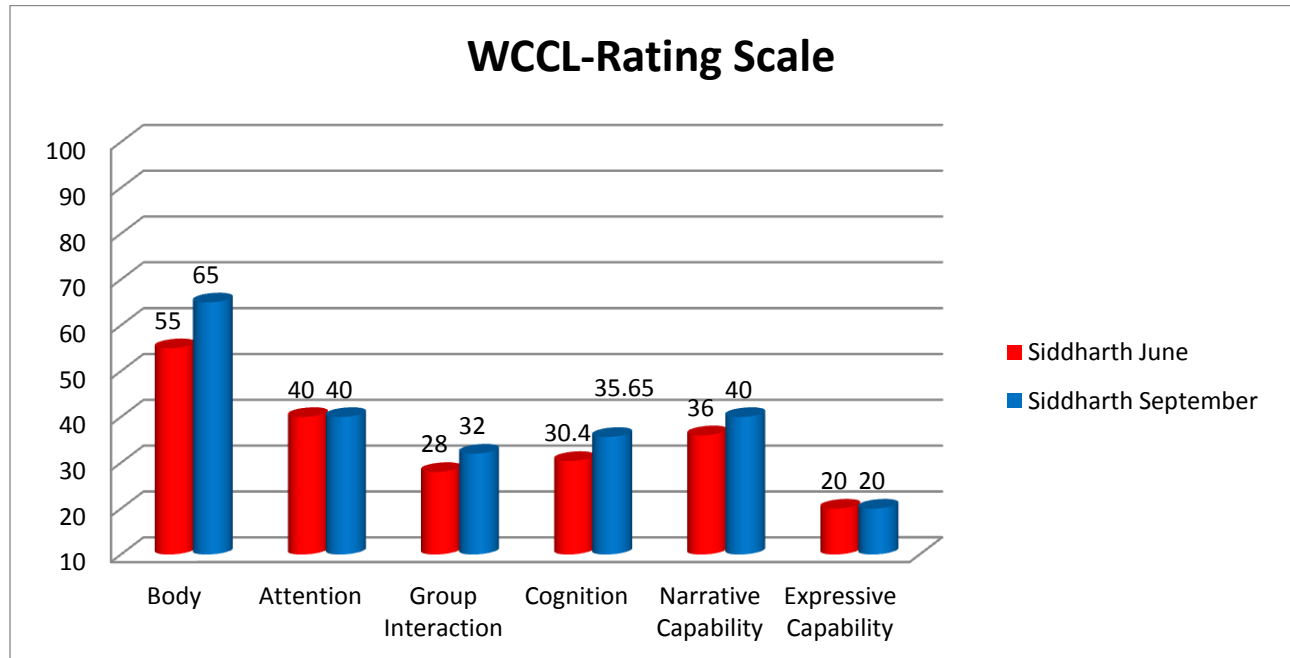
Child's strengths: Siddharth had good cognitive ability, he responds well to adults.

Creation: Assessment domains and Therapeutic goals for Siddharth in June 2014.

- Group interaction: Impulse control
- Narrative capability : expression of unease and anxiety

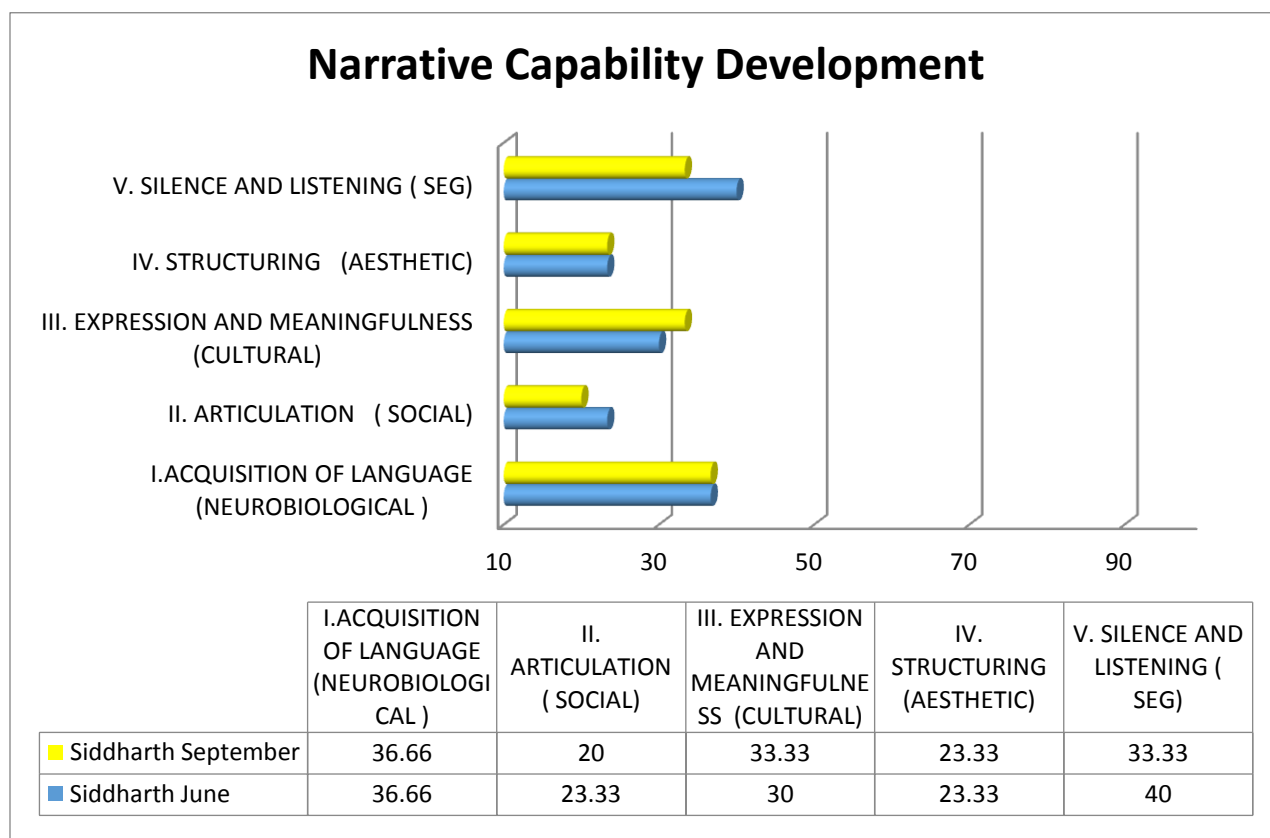
Siddharth has shown some progress with regards to his aggressive anxiety outbursts and his interpersonal interactions. He is more responsive to instructions than before and bit calmer than at the beginning of the intervention. He was the most participative in buddy activities during sessions and stayed with his buddy Adarsh though such sessions egging him on to participate using gestures. He was the first to grasp the concept of buddies and promptly looked for his own whenever asked to pair up. Although his anxiety outbursts still remain an area to be worked on he has become calmer in sessions and can come out of these episodes faster than before. Using the word 'Happy' when he starts to get anxious has helped shift focus and calm him down instantly on most occasions.

Graph 23: Siddharth's pre and post test results on the WCCL- Rating Scale



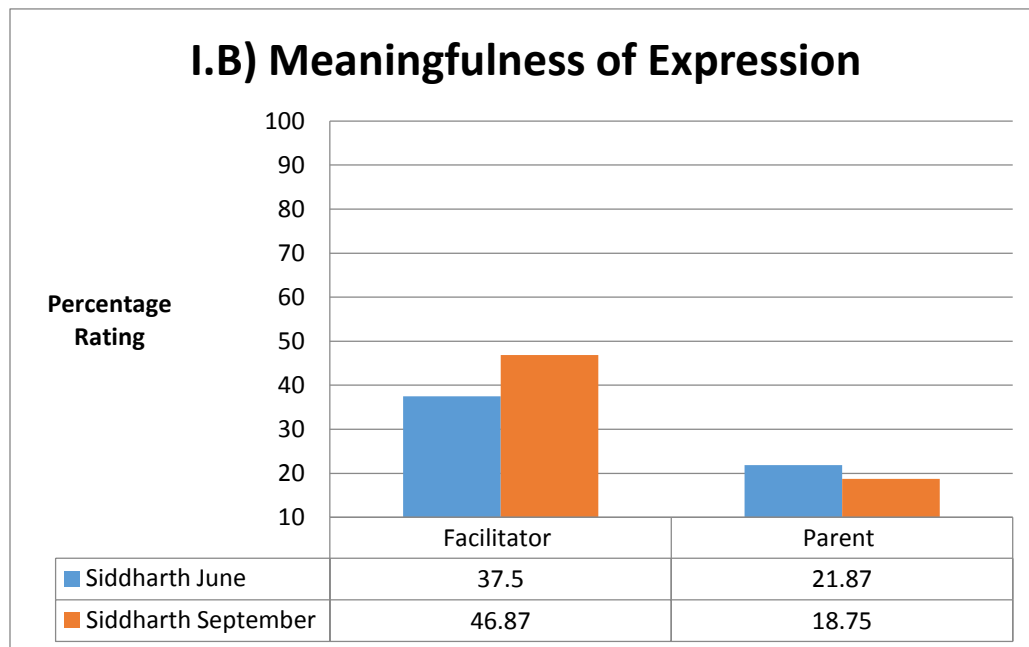
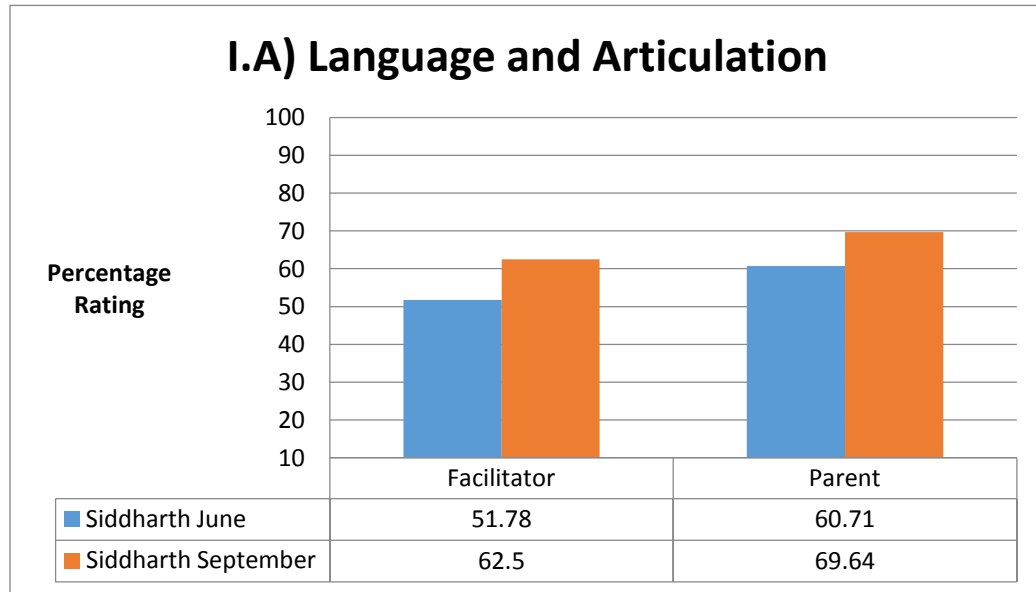
Siddharth's pre and post test results on the WCCL- Rating Scale indicate subtle changes. There has been improvement in the areas of 'Body', 'Group interaction', 'Cognition' and 'Narrative Capability'. While the areas of 'Attention' and 'Expressive capability' remain constant from June to September. Siddharth's response to instructions is good and he remains in the group at all time during group sessions. He also interacts with his peers whenever prompted. He usually expresses himself using a few words to indicate his needs. He also uses the word 'Hi' often to get one's attention. However he still has difficulty expressing his anxieties.

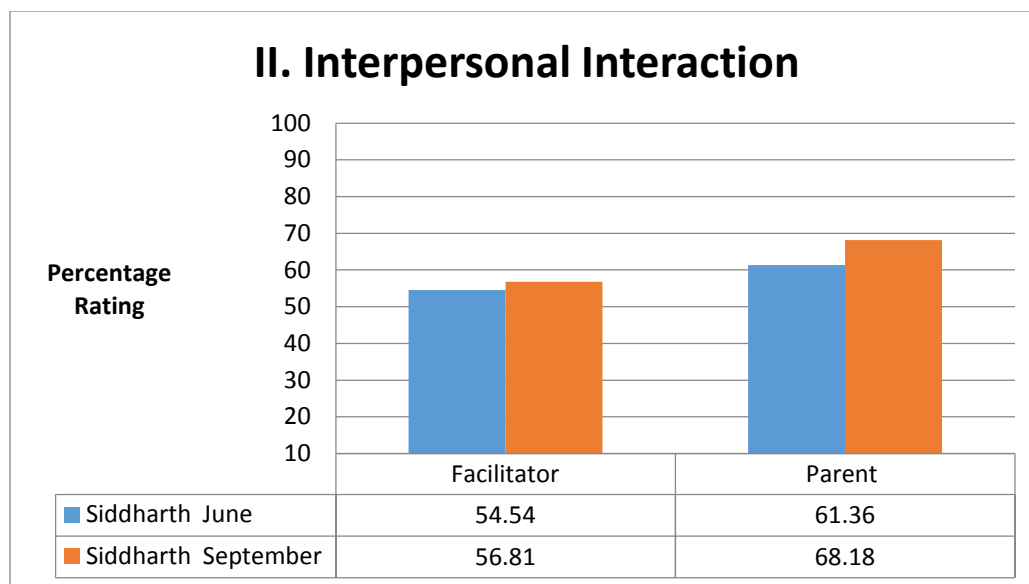
Graph 24: Siddharth's pre and post test results on the Narrative Capability Development Scale



Siddharth is a verbal child usually responding with echolalia. He is able to respond to a few standard questions, the answers of which he has memorized by rote. He is able to use a few words to indicate needs and wants and saying 'hi' often to get someone's attention. He has a large enough vocabulary which is seen during flash card activities where he is able to call out the names of objects on picture cards. He is however unable to use these words meaningfully in communication. He did not respond much to the use of song as a communication tool. The results on the his Narrative Capability Development indicate that his narrative capability has been more or less constant with some positive changes in 'Articulation', 'Expression and Meaningfulness' and 'Structuring'.

Graph 25, 26, 27: Siddharth's pre and post test rating on the following Observation formats as rated by his parents and ABT facilitator.





The three observations formats I a) Language and articulation I b) Meaningfulness of expression and II. Interpersonal Interaction were rated in June and September by the facilitator and the parents of the child. The graphs above represent the percentage ratings given by both the facilitator and the parents in June and September.

Pre and post test results on the domain of ‘Language and articulation’ indicate a positive shift in the use of language as rated by the parent and facilitator. It has been noted that Siddharth’s uses a few more words than his usual list when making his needs heard. He also repeats new words but is yet to use them appropriately.

On the domain of ‘Meaningfulness of Expression’ which involves the use of gestures to enable communication Siddharth showed some change in ABT session as rated b the facilitator.

However there has been a decrease in the use of gestures for expression at home as rated by the parent. Siddharth uses gestures to indicate what he wants or to gain attention this has been observed as the sessions progressed.

There has been a small positive change in ‘Interpersonal interaction’ as rated by the facilitator and the parent. This was seen in later ABT sessions when Sddharth’s anxiety outbursts had reduced. He was calmer in group sessions and interacted well with others when prompted. He is yet to voluntarily interact with his peers.

Comparison of drawings and paintings

Siddharth is very structured and rigid when engaging with visual art. He usually covers the whole sheet in colour strategically and rarely experiments with different colours. The pictures below are creations from June and September and do not show much change in style or content.

June



September



KABIR; Age: 8 years

Family background: Kabir is the only child to his parents. He lives with his parents and grandmother. His father works in IT and mother is a home maker.

Academic and rehab background: Kabir is a friendly child who is verbal but does not speak much. He communicates using words, sounds or short sentences. Kabir has been coming to the centre for a little more than a year. He does not interact much with his peers but is comfortable being by himself. He tends to have bouts of anxiety or anger and screams loudly at times and or bites his own hand. He is responsive to instructions and can communicate his basic needs but has trouble expressing his feeling and wants. He likes music and singing and learns songs by rote. He has good symbol recognition and rote memory. He has a fascination for fans and other rotating objects; they seem to have a calming effect on him. He has tried speech and occupational therapy and currently sees a special educator once a week.

Medical background: Diagnosed with ASD and PDD he is on homeopathic medication structured around the “cease” methodology

Special Care instructions (if any) relevant stressors, any other precautions whilst playing:

If angry or upset tends to bite an object lying around or his own arm. Triggers are unknown and could vary. Has a fixation for fans, lifts and motors.

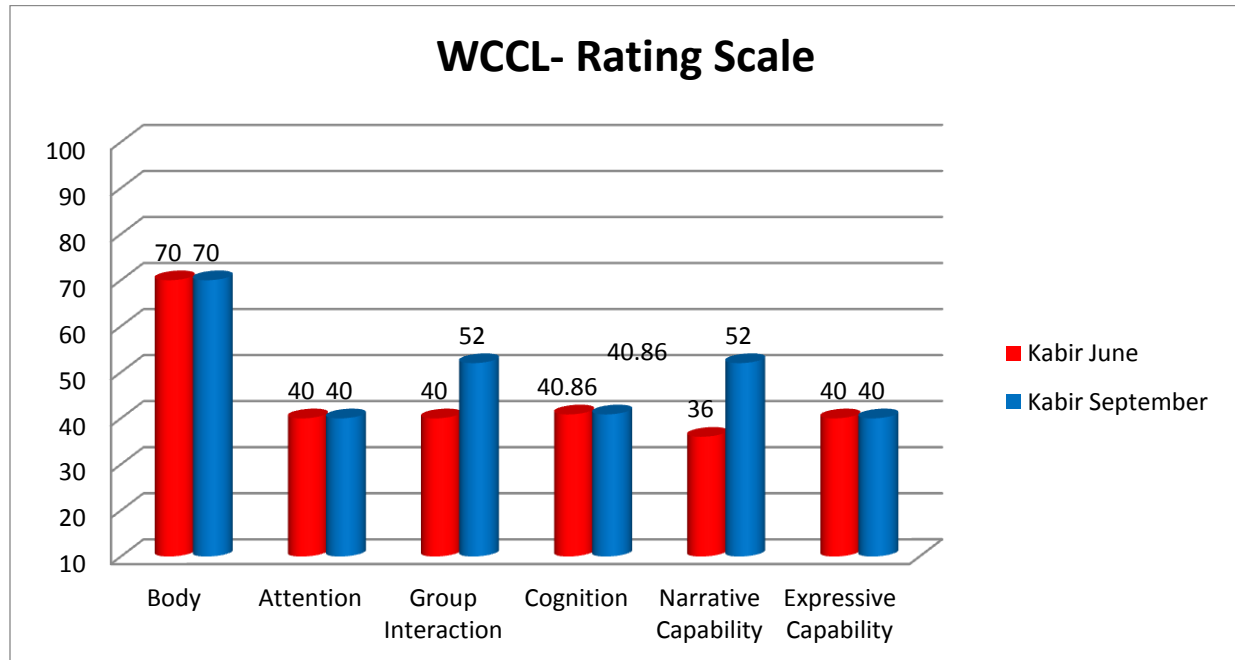
Client’s strengths: Adjusts easily, happy most of the time, compliant and responds to instruction.

Creation: Assessment domains and Therapeutic goals for Kabir in June 2014

- Group interaction: Impulse control
- Narrative capability: Simple sentences to communicate needs and feelings

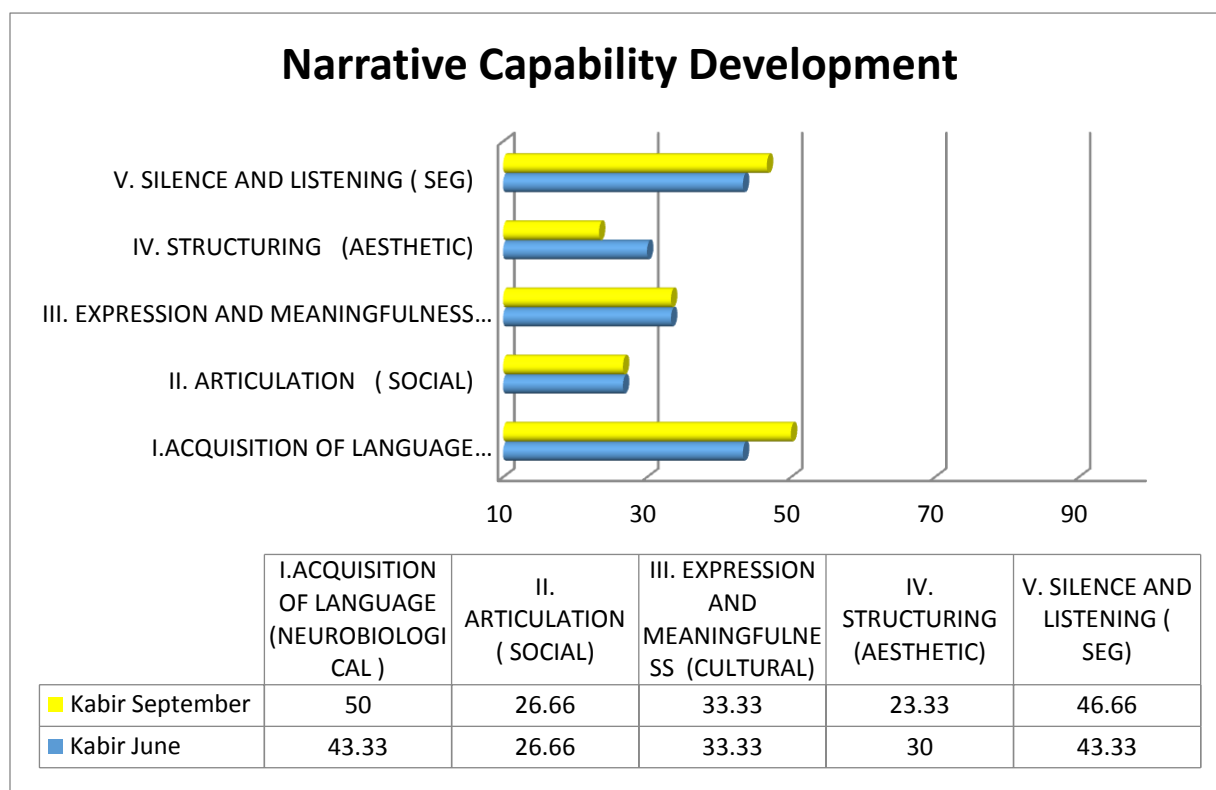
Kabir has been a calm child and compliant in group sessions. He tends to have short episodes of anxious screaming when he is upset. The triggers usually include changes in the environment or the discomfort of sharing materials with his buddy. Although this is an area to be worked on, Kabir is a compliant and a happy child. He has shown some shift in expressing himself meaningful and is working on communicating more effectively.

Graph 28: Kabir's pre and post test results on the WCCL- Rating Scale



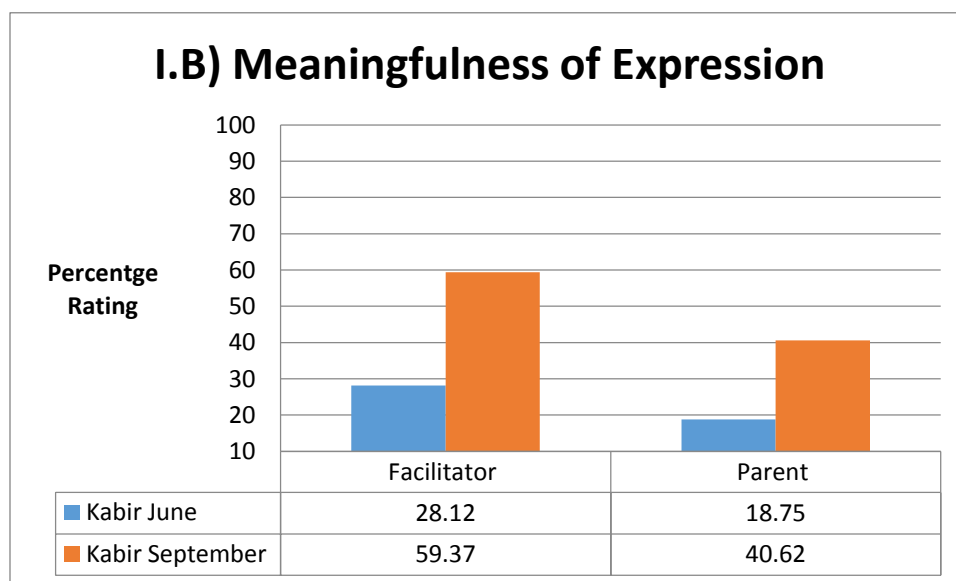
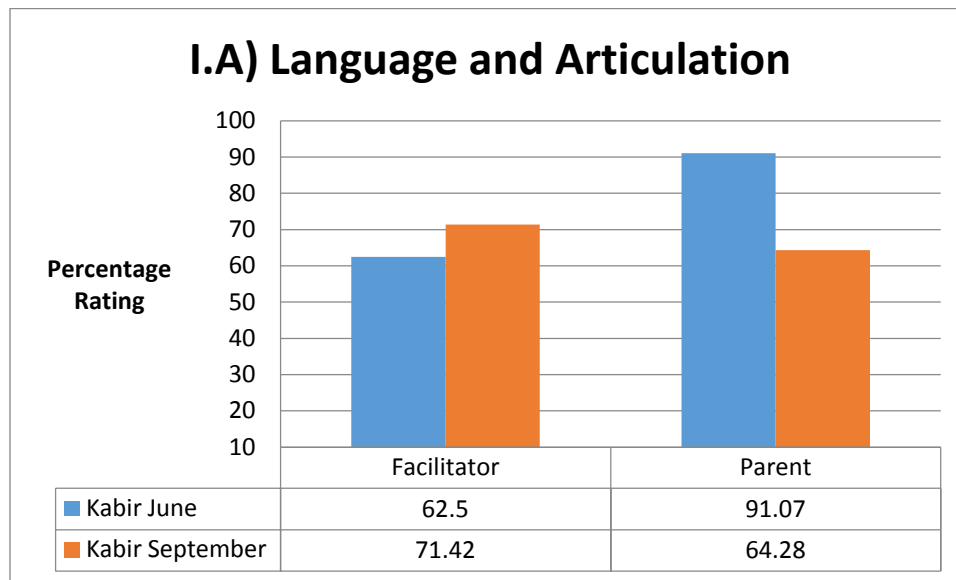
Kabir's ratings on the WCCL- Rating Scale indicate consistency in 4 out of 6 domains. There have been some shifts in the domains of 'Group interaction' and 'Narrative capability'. Like most in the group Kabir is a musical child who enjoys singing to himself. His use of song gets him more involved in group activities and his response to group instructions has increased. He picks up new words when they are sung and uses them occasionally when prompted. He was able to remember the names of most of his peers by the end of the intervention. Results hence reflect that his group interaction has increased in addition to his Narrative capability.

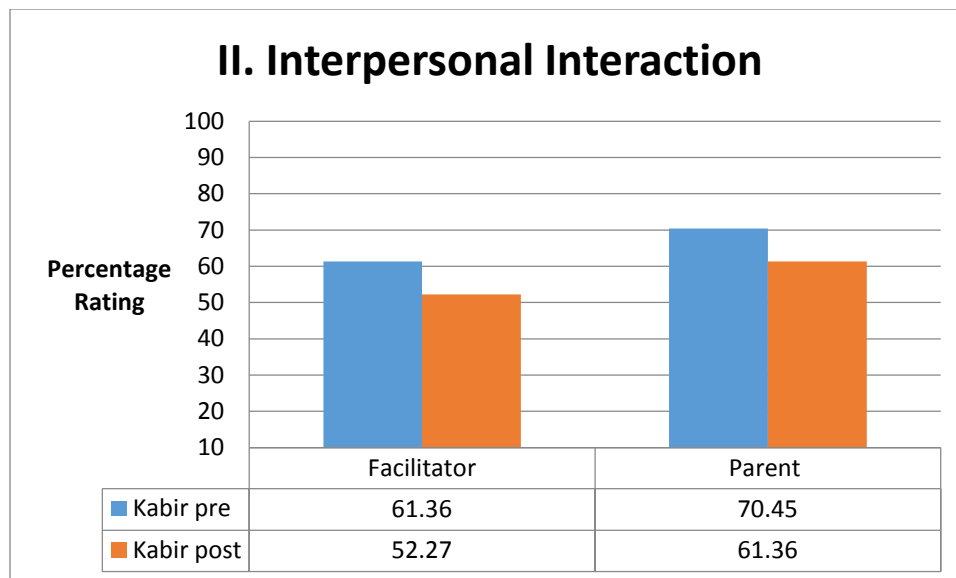
Graph 29: Kabir's pre and post test results on the Narrative Capability Development Scale



Kabir is a verbal child. He however uses a fixed range of words to indicate wants, likes and dislikes. Cognitively is able to understand instructions and even objects on flash cards as he promptly calls them out when shown picture cards. He finds it difficult to articulate his anxieties and often screams when unable to communicate discomfort that maybe bodily or due to sudden change in the environment. Kabir was able to pick up on some new words when they were sung during sessions. Pre and post test results indicate that Kabir has made some positive shifts in the domain of 'Acquisition of Language' and 'Silence and Listening', while his result on 'Articulation' and 'Expression and meaningfulness' remain constant. There seems to be a decrease in 'Structuring' since June i.e his ability to structure sentences appropriately to make his wants heard. It has been observed that Kabir became quieter during the end of the intervention engaging only when prompted.

Graph 30, 31,32: Kabir's pre and post test rating on the following Observation formats as rated by his parents and ABT facilitator.





The three observations formats I a) Language and articulation I b) Meaningfulness of expression and II. Interpersonal Interaction were rated in June and September by the facilitator and the parents of the child. The graphs above represent the percentage ratings given by both the facilitator and the parents in June and September.

On the domain of 'Language and Articulation' Kabir has shown some improvement in ABT sessions as rated by the facilitator but there seems to be a decrease in the area as rated by his parents. It was observed that Kabir picked up new words and used them appropriately when they were repeated in a given context. He tends to learn language by rote and sequence according to the situation.

On the domain of 'Meaningfulness of Expression' results show a positive shift indicated by both facilitator and the parent. Kabir uses more non verbal communication to express himself meaningfully than before. For instance he may lead the way if he wants to go somewhere or point to something that he wants.

Results on the domain of 'Interpersonal Interaction' show a negative shift as indicated by both the parent and the facilitator. This reflects Kabir's recent shift in behavior in group settings. He is calm and tends to be detached from the group unless prompted to participate. He usually stays within the group but tends to be in his own world for most sessions, except the one's involving visual art.

Comparison of drawings and paintings

Kabir enjoys visual art the most and engages whole heartedly in the various activities. He uses all art tools and even his hands according to the activity. There has not been much change in his style or the content of his paintings. He is more involved in the process than the outcome and often likes to destroy his work after creating it like any great artist.

June



September



SECTION 5: DISCUSSION

5.1 Limitations:

There were a few limitations in the study. Since most assessment data was based on rating scales rated by either the facilitator or the parents the possibility of response bias is high. Subjectivity and social desirability thus have a role to play in most data analyzed.

Attendance of a few participants was another limitation. The group worked with was not always at its full strength for all 35 sessions.

The addition of other participants into the group is another factor which must be taken into consideration. A few sessions had the inclusion of participants other than the 6 that were a part of the ABT group. These additions may have altered the dynamics of the group in those particular sessions.

5.2 Learnings:

This study has given me insight into the inner worlds of children with ASD. Many learnings have emerged through the months and the experiences have been unquantifiable. I realized the power of intent when sessions seemed to be going nowhere and experienced the most perfect order emerge after complete chaos. When the destination felt like but a dream the path magically appeared and each child lead the way with myself remaining but a bystander. I learnt that all I had to do was be there and be open to infinite possibilities.

The learnings have been immense and each child has taught me a new lesson through the process. Akshita taught me to be loving yet detached and independent. Siddharth taught me how to smile even if everyone around seems unhappy or stressed. Eshaan taught me to remember and appreciate the child within allowing her out every now and then. Adarsh showed me how to look with wonder at the small things and appreciate the smallest of blessings even if it is a leaf. Naren taught me how to be blissful and happy in the present moment. And Kabir taught me how to laugh even when I am surrounded by chaos.

With reference to methods used during the intervention one of greatest learnings from working with children with ASD has been the use of Music, rhythm and rhyme in bringing children together, getting them involved and enhancing communicative vocabulary. All the children in the

group became calmer when music was used and even learned the names of all their peers in three months because it was sung everyday as opposed to when they were just told their names everyday for a year prior. A particular rhyme or song served as a tool for communication and the group eventually began to improvise by themselves when expressing themselves. My findings relate to a large extent to studies already conducted in the areas of Music therapy and Autism, particularly the studies of Kim et al (2008), Hayoung Audrey Lim (2007) and (Wan,C.Y & Schlaug,G 2010) as described further in the literature review.

5.3. Future

In the future I would like to continue working with children with autism experimenting further which the use of rhythm, rhyme and music to facilitate communication and expression. If music can help children look beyond themselves the possibilities for facilitating other learning are large. I wish to further explore the areas of expression and communication in children with Autism using non traditional methods and mediums. I believe these children are wiser and more intelligent than we assume them to be and communication is largely our need to understand them better. Hence providing them a tool, musical or otherwise will greatly benefit interactions between these children and ourselves.

APPENDIX A

NARRATIVE capability Development (NcD)

CAPABILITY- PARAMETERS	BASIS AND RATING	30
I. ACQUISITION OF LANGUAGE	NEUROBIOLOGICAL	
1. Vocalization (sounds) with intonation		
2. Basic vocabulary		
3.Simple sentences understood and said		
4.Understanding of simple questions		
5.Sounds reasoning		
6. Fluent speech		
II. ARTICULATION + SOCIAL		
1.Grammatical lapses		
2.Spontaneous use of new words		
3.Appropraite use of pronouns, prepositions and verb		
4.Descriptive use of speech		
5.Loud reading with considerable ease		
6.Understands/does quirks and fun in speech		
III. EXPRESSION AND MEANINGFULNESS + CULTURAL		
1.In context		
2.Personally meaningful		
3.Meaningful to others		
4.Spontaneous but expressive		
5.Thoughtful but expressive		
6. Consciously symbolic		
IV. STRUCTURING + AESTHETIC		
1.Vaguely structured		
2.Structured with beginning and end		
3.Structured with beginning - middle and end		
4.Awareness of story structure		
5.A proper story constructed		
6.Story and deeply meaningful		
V. SILENCE AND LISTENING + SEG		
1.Silent when talked to (no reponse)		
2.Listens and understands, but no appropriate response		
3.Appropriate silence		

4.Reflectively silent		
5.Deep listening		
6.Meaningful listening and relevant responses		

I. A) Observation Format: Language and articulation

Name of Child _____ Date: _____

Sr. no		Never 0	Rarely 1	Sometimes 2	Frequently 3	Always 4
1.	Is able to imitate voice intonation patterns of others					
2.	Is able to produce animal sounds or uses sound in interactions					
3.	Is able to vocalize to gain attention					
4.	Is able to respond appropriately to tone of voice					
5.	Is able to understand and follow simple verbal instructions					
6.	Is able to use single words meaningfully to label object or person					
7.	Is able to answer the question "what's this?" with object name					
8.	Is able to combine use of words and gestures to make wants known					
9.	Is able to ask for some common food items by name when shown					
10.	Is able to use word for bathroom need					
11.	Is able to answer yes/no question appropriately using vocalizations					
12.	Is able to express 'like' and 'dislike' meaningfully using words					
13.	Is able to sing more than 3-4 lines of a song with lyrics					
14.	Is able to indicate basic feelings using words eg: Hungry, sleepy, happy, sad					

I. B) Observation Format: Meaningfulness of non-verbal communication

Name of child _____ Date _____

Sr. no		Never 0	Rarely 1	Sometimes 2	Frequently 3	Always 4
1.	Is able to acknowledges another using gestures					
2.	Is able to use gestures to gain attention					
3.	Is able to answers simple questions with nonverbal response					
4.	Is able to express needs of food and toilet using gestures					
5.	Is able to answers yes/no question appropriately using gestures					
6.	Is able to expresses 'like' and 'dislike' meaningfully with gestures					
7.	Is able to indicate owns feelings/ emotions with the help of flash cards when asked					
8.	Is able to lead the way using gestures					

II. Observation Format: Interpersonal Interaction

Name of child _____ Date _____

Sr. no.		Never 0	Rarely 1	Sometimes 2	Frequently 3	Always 4
1.	Is able to acknowledge the presence of others in the room					
2.	Is able to make eye contact for more than 10 seconds					
3.	Is able to reach for familiar persons					
4.	Exhibits joint attention					
5.	Is able to imitate behaviours of another child /adult					
6.	Is able to take initiative to lead in a group					
7.	Is able to follow group activities by watching others without prompting					
8.	Is able to share material and resources without instruction					
9.	Is able to play a game involving another child for more than 2-3 minutes					
10.	Is able wait for one's turn when playing with others					
11.	Is able to follow simple game rules					



World Centre for Creative Learning Foundation

RATING SCALE – CHILDREN WITH SP. NEEDS

Dear ABT Practitioner,

Given ahead is a rating scale that describes several behaviors, ways of thinking, skills & abilities. We suggest that you utilize the rating scale in the following manner:

We would like to request you to go through each item and rate the participant on a 5 point rating scale. You can collate the scores and do a simple average. $\text{Average} = (\text{Score Total}) / (\text{Number of Questions} \times 5)$.

Please do not leave any item unmarked. We recognize that it is often difficult to rate an individual on such specific aspects, and in such a structured manner, especially when you have so much information about them. We would still like you to organize your thoughts and mark the rating scale based on your observations.

A final column has been added just in case, you absolutely want to add a comment to clarify the rating you have given.

Please read carefully and tick (✓) the appropriate rating. Write the score for each therapeutic goal in the 'score' column

1. S. No/ Code No:

2. Name of Participant being rated:

3. Name of Rater:

4. Date of Rating:



BODY		1	2	3	4	5	Score	Comment
B 1	Moves in a coordinated manner	Almost never	Rarely	Sometimes	Frequently	Almost always		
B 2	Exhibits quick reaction time	Almost never	Rarely	Sometimes	Frequently	Almost always		
B 3	Has the fine motor skills to perform given tasks	Almost none	Little	Somewhat	Quite a lot	Almost all		
B 4	Speech is clear (not slurred)	almost never	barely clear	somewhat clear	mostly clear	Almost always		
Total Score [Body] =								Average =
ATTENTION		Choose any one of the sentences below					Score	Comment
A 1	Barely manages to Focus on task/activity. hardly any eye-contact (1)							
	Sustains attention on task/activity at hand for some time (2)							
	Concentrates for long time on set task/activity even when there are distractions (3)							
	Can alternate and divide attention between two simultaneous tasks/activities (4)							
	Almost always shows a stable attention span accompanied with being present in-the-moment (5)							
Total Score [Attention] =								
GROUP INTERACTION DOMAIN		1	2	3	4	5	Score	Comment
GI 1	Shares material, ideas, solutions	Almost never	Rarely	Sometimes	Frequently	Almost always		
GI 2	Takes initiative within the group	Almost never	Rarely	Sometimes	Frequently	Almost always		
GI 3	Is sensitive to group member's needs and helps them	Almost never	Rarely	Sometimes	Frequently	Almost always		
GI 4.a	Can wait for needs/desires to be fulfilled	Almost never	Rarely	Sometimes	Frequently	Almost always		
GI 4.b	Can hold back on expressing views when appropriate to do so	Almost never	Rarely	Sometimes	Frequently	Almost always		
Total Score [Group Interaction] =								Average =



COGNITIVE DOMAIN		1	2	3	4	5	Score	Comment
C 1.a	Can discriminate between similar sounding speech sounds (hear/hear)	Almost never	Rarely	Sometimes	Frequently	Almost always		
C 1.b	Can repeat sound patterns which s/he hears	Almost never	Rarely	Sometimes	Frequently	almost always		
C 2.a	Can read	Almost None	Little	Somewhat	Quite a lot	Fluently		
C 2.b	Can Spell	almost none	Little	Somewhat	Quite a lot	almost all		
C 3.a	Can repeat short phrases	Almost never	Rarely	Sometimes	Frequently	Almost always		
C 3.b	Can remember information or instructions, and talk about it.	Almost none	Little	Somewhat	Quite a lot	Extremely fluent		
C 4.a	Can learn movements taught, and repeat them with eyes closed	Almost none	very few	Sometimes	Frequently	even most difficult moves		
C 4.b	Can discern shapes of objects, with his/her eyes closed, using touch	almost never	Rarely	Sometimes	Frequently	almost always		
C 4.c	Is good at games, sports, athletics	Almost none	Little	Somewhat	Quite a lot	Almost all		
C 5.a	Is able to understand age appropriate number concepts.	Almost none	Little	Somewhat	Quite a lot	Almost all		
C 5.b	is able to tell how much of something he has, how much he needs and how much is left to spare (e.g. money, distance, time)	Almost never	Rarely	Sometimes	Frequently	Almost always		
C 6.a	Can describe how to go from one place to another (age appropriate)	almost never	Rarely	Sometimes	Frequently	Almost always		
C 6.b	Is able to locate objects within surroundings	Almost never	Rarely	Sometimes	Frequently	Almost always		



COGNITIVE DOMAIN (Contd.....)		1	2	3	4	5	Score	Comment
C 6.c	Can draw a floor plan of the therapy room	Almost none	no details	some details	many details	very detailed		
C 7.a	Can understand cause-effect relationship (why events happen)	Almost never	Rarely	Sometimes	Frequently	Almost always		
C 7.b	Understands the rules of age-appropriate games*	Almost none	Little	Somewhat	Quite a lot	Almost all		*special focus on 'If - Then' relationship
C 7.c	is able to solve simple problems by weighing options, considering alternatives, comparing & choosing	Almost never	Rarely	Sometimes	Frequently	Almost always		
C 8	is fluent in using mobile phone features, computer programs and other gadgets	almost never	Rarely	Sometimes	Frequently	Almost always		
C 9.a	Can tell the 'moral/real meaning' of a story after listening to the story.	almost never	Rarely	Sometimes	Frequently	Almost always		
C 9.b	Can delay immediate gratification for more long-term goals.	almost never	Rarely	Sometimes	Frequently	Almost always		
C 9.c	Can make a 'goal-oriented plan' - deciding what is critical and how to start	almost never	Rarely	Sometimes	Frequently	Almost always		
C 10.a	Can pick up the 'mood/feelings' of other person by observing facial expression, body language & tone*.	Almost never	Rarely	Sometimes	Frequently	Almost always		*use mime/dramatic expressions and sounds without words.
C 10.b	Can examine an image/images* and understand the picture's story-line, thereby arrive at correct conclusion	Almost never	Rarely	Sometimes	Frequently	Almost always		*test should not contain words, only images
Total Score [Cognitive] =								Average =

NARRATIVE CAPABILITY		1	2	3	4	5	Score	Comment
NC 1	Vocalizes vowels and consonants	Almost none	very few	half of them	most of them	Almost all		
NC 2	is able to utilize words with meaning	Almost none	very few	some words	many	Almost all		
NC 3	Is able to create short simple sentences	Almost never	Rarely	Sometimes	Frequently	Almost always		
NC 4	Gives meaningful and personal answers to open-ended questions	Almost never	Rarely	Sometimes	Frequently	Almost always		
NC 5	can narrate a story in correct sequence	Almost never	Rarely	Sometimes	Frequently	Almost always		
Total [Narrative Capability] =								Average =
EXPRESSIVE CAPABILITY DOMAIN							Score	Comment
EC 1	Can express him/herself through artistic media* - <u>Choose one answer</u>	Only imitating (1)						*Specify his/her favorite artistic medium
		keeps displaying repetitive artistic skill (2)						
		Improvises with group/ABT practitioner (3)						
		Improvises on small metaphors or images (e.g. factory) (4)						
		Creates a personal artistic expression which is rich in metaphorical meaning (5)						
Total Score [Expressive Capability]								Average =
TOTAL SCORE [B + A + GI + C + NC + EC]								

SESSION RECORD SHEET (SRS)

1) SEG Practice (Please tick)														
(1.a.) 30 minutes daily health practices	(1.b.) Daily meditation	(1.c.) Creating Intent	(1.d.) Protection Steps for All	(1.e.) Space Cleaning										
2) Assessment Inputs (Please tick)														
(2.a.) Observer	(2.b.) AV	(2.c.) Standardized Test		(2.d.) Mentor / ABT Guide Visit										
		(2.c.i.) Pre	(2.c.ii.) Post											
3) Session Plan Most commonly occurring therapeutic Domains:														
Therapeutic Goals for today:														
Key Concepts (if any):														
Space and Material Preparation:														
<p>(3.1) Communion:</p> <p>Rituals:</p> <p>Skill Warm Up:</p> <p>Tick one or multiple options below & write description if necessary:</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <tr> <td style="width: 20%; padding: 5px;">Rhythm <input type="checkbox"/></td> <td style="width: 20%; padding: 5px;">Voice <input type="checkbox"/></td> <td style="width: 20%; padding: 5px;">Body <input type="checkbox"/></td> <td style="width: 20%; padding: 5px;">Painting & <input type="checkbox"/> Drawing</td> <td style="width: 20%; padding: 5px;">Games & Exercises <input type="checkbox"/></td> </tr> <tr> <td style="height: 150px; vertical-align: top; padding: 5px;"><i>Description</i></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>					Rhythm <input type="checkbox"/>	Voice <input type="checkbox"/>	Body <input type="checkbox"/>	Painting & <input type="checkbox"/> Drawing	Games & Exercises <input type="checkbox"/>	<i>Description</i>				
Rhythm <input type="checkbox"/>	Voice <input type="checkbox"/>	Body <input type="checkbox"/>	Painting & <input type="checkbox"/> Drawing	Games & Exercises <input type="checkbox"/>										
<i>Description</i>														

(3.2) Creation: Tick or cross one or multiple options below & write details of activity:

ARTISTIC SKILLS <input type="checkbox"/>	IMPROVS <input type="checkbox"/>	METAPHORS <input type="checkbox"/>

(3.3) Closure:

Disengage from the Creation (De-roling)	Take home metaphors or creative discussions	Closing Ritual

4) Post Session: ABT Practitioner's Notes

(4.1) Actual session sequence:

Use the Grids Nomenclature when referring to each Activity in the sequence.

Write exact sequence of events as they unfolded:

(4.2) Observations about Clients:

S. No.	Name	INDIVIDUAL THERAPEUTIC GOALS	OBSERVATIONS, ANECDOTES, DIALOGUES & DISCUSSIONS
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			

(4.3) Group Observations:

Therapeutic Domains / Goals	Observations

(4.4) Changes:

Any TG which needs to be added or removed next time?

A specific Non-ABT technique/tip which was useful?

A specific challenge area, which needs supervisory attention.

A specific skill up-gradation /theory reading required on the part of practitioner?

Any specific deep-rooted habitual pattern/s to be worked on

(4.5) Ideas for Next Session

APPENDIX B

Session no.	Date	Key concept	Metaphor	Artistic Skill	Artistic Communion	Focussed Creation	Closure	Therapeutic Goals
1	2nd June	Sharing	Patterns in the sand	Visual art	Opening ritual and hand movement warm up, songs using finger actions	Pair the children and give each pair one chart paper. Get them to draw patterns or shapes on their chart using crayons. Give them a tray of sand and some glue. Get them to fill in these shapes or patterns with sand by applying glue first and gently applying sand over the glue covered area.	Clean up space and self. Put the creations together. Quiet time and closing chant.	Buddy work, sharing, fine motor activity
2	3rd June	Togetherness	Dance	Body-movement	Opening ritual of circle up using song, body stretches for skill warm up.	Scarves are handed out to each child. Movement and dance with music playing in the background and the scarves as props. All the parts of the body are involved in the dance starting with the feet. Each child can lead a movement followed by the others. Ability to follow is observed.	Fold the scarves and put them away. Quiet time and closing chant	Imitation, group interaction, movement, lead and follow
3	9th June	World of colour	Butterfly	Visual art	opening ritual and song " watch me"	Give each child small sheets of chart paper and paint in trays. Have them paint one side of the sheet fold and press. Creating a butterfly pattern. Mix and add different colours to create colourful butterflies.	Clean up, quiet time and closing chant	expression through colour, fine motor, ability to follow a sequence of instruction, memory

Session no.	Date	Key concept	Metaphor	Artistic Skill	Artistic Communion	Focussed Creation	Closure	Therapeutic Goals
4	10th June		Drum beats	Rhythm and voice	Opening ritual and gross motor exercises	Bring out djembes and frame drums. Start with pulse and get the children to follow simple beats using counts. Sing songs to complement the beats. Eg " Baba ah gumbala" and "The ants go marching"	Put the drums away. Quiet time and breath work	Gross motor exercise, voice, following instructions, vocalization, coordination and group interaction.
5	11th June	Segregation	Order in Chaos	Games+ Body	Opening ritual and finger exercises	Give the children links of different colours and types. Mix them up in trays and like a game 1) Ask them to sort the in order of type 2) In order of colour with the help of labelled trays. 3) Ask them to connect links in pairs according to type.	Collect the materials and put them away. Quiet time and closing chant.	Fine motor, sorting, associations, vocabulary (colour), following instructions
6	16th June	Animals	Paw prints	Visual art	Opening ritual with sing. Fine motor warm up. Song " there are lions in the jungle" add animals introduced by the group	Group activity on a big sheet of chart paper. Provide paints in trays. Demonstrate how to make paw prints using palms and fingers. Make the prints of various animals and talk about them	Clean up space and self. Quiet time.	Fine motor, animal associations, vocalization of animal sounds, sharing material.

Session no.	Date	Key concept	Metaphor	Artistic Skill	Artistic Communion	Focussed Creation	Closure	Therapeutic Goals
10	24 th June		Shake a leg	Body-Movement	Opening ritual. Body warm up of all the parts of the body	Shakers are given. Standing movement using shakers. Up/down, Left/right, jump up/down, bend/stand. Walk around the room at varying paces with the shakers providing a rhythm. Facilitator can provide counts to synchronize sound. Or music can be played in the background	Freeze game dance song using the shakers as a dance prop.	Following instructions, body agility, coordination, working in a group
11	30th June	Body awareness	Outlines	Visual art	Opening ritual, song "boogie woogie"	Divide the children in pairs or groups of three. Get one to lie down on a large sheet of paper and the others to draw an outline of their body. The children in the groups should label the body parts out loud. They are then left to fill in the body map with any medium they like. Paints, crayons etc are made available in trays.	Song " all the cells in my body", quiet time	Fine motor, following instructions, cognitive, group work
12	2nd July		From darkness to light	Body-senses	Opening ritual. Body warm up/ exercise and songs - Happy and you know it, ants go marching	Children are paired. One is blindfolded and led by the other who can see. The one who can see supports the other to walk around the room and touch objects of different textures placed on tables / hanging on the window. Eg: beads, sponge, cloth, stuffed toys etc. The child blindfolded is encouraged to explore the space. Roles are then reversed after sufficient time is given for exploration.	Quiet time and chanting sitting in a circle	to experience walking without seeing, buddy work, exploration of senses, mental map of space

Session no.	Date	Key concept	Metaphor	Artistic Skill	Artistic Communion	Focussed Creation	Closure	Therapeutic Goals
13	4th July	Communication	Act	Voice, movement	Opening ritual. Song: If you're happy and you know it using actions words	A list to 10 action words in flash cards are presented to the children on a board. Each one is viewed with children vocalizing the word and enacting the action. Eg : Jumping, sitting, walking, etc	Quiet time and closing chant	Gross motor exercise, voice, following instructions and rhythm, coordination
14	8th July		Beats	Rhythm and voice	Opening ritual and gross motor exercises	Bring out djembes and frame drums. Start with pulse and get the children to follow simple beats using counts. Sing songs to compliment the beats. Eg " Baba and gumba" and others	Put the drums away. Quiet time and breath work	Association, interaction within the group, gross motor movement
15	9th July		I can float	Games, visual art	Opening ritual with song " row row" " ailasa" in the formation of a boat	Bring out a tub of water and objects of all kinds that sink and float. Eg clips, wood, cork, stones, keys etc. Let them drop the objects one by one into to tub to see whether they float or sink. Later make two circles on the floor for the objects that sink and those that float. Help them to sort the objects from the tub into the two piles.	Give the children paper to make paper boats. Have them float their paper boats in the tub. End with song " row row" and closing chant	Understanding the concept of sink and float, sorting, associations, vocabulary

Session no.	Date	Key concept	Metaphor	Artistic Skill	Artistic Communion	Focussed Creation	Closure	Therapeutic Goals
16	15th July		Colour body	Games, Body - movement	Opening ritual and a game - colour calling and playing colour colour which colour do you choose.	Start with head to head, leg to leg and then improvise. Now move to red elbow. For movement in pairs - The alphabet aerobics song /game	Game- involves the facilitator calling out a colour and a body part. Students must find an object in the room that is that colour and then touch the selected body part to that object. For example, if the teacher calls out pink thumb, then students need to find an object that is pink and touch it with their thumb. The facilitator continues calling colours and body parts.	Reaction time, following instructions, group interaction
17	17th July		Musical chowkies	Games, Body- movement	Opening ritual and name ritual.	Play musical chairs using chowkies. Explain the rules and have some start and stop the music indicating that the children have to sit on the available chowkies.	Quiet time and closing chant	Fine motor, cooperation, group work
18	21st July	Working together to create	Collage	Visual art	Opening ritual and skill warm up - tearing crepe paper into small bits, sorting them colour wise.	On a big chart paper, apply glue on the entire surface, children stick the bits of paper at random. The focus is on doing an activity which is less challenging but repetitive.	Displaying the collage that contains colourful papers stuck by all the children. There is no directive in terms of where the paper should be stuck, appreciate the finished artwork which is a minimally directed, collective effort.	Attention, awareness, expression

Session no.	Date	Key concept	Metaphor	Artistic Skill	Artistic Communion	Focussed Creation	Closure	Therapeutic Goals
19	22nd July	Breath awareness	Breath Strokes	Visual art	Opening ritual and meditation with Zen music	Zen painting techniques are explored with music in the back ground. Children are given Black acrylic paint/ ink and paint brushes and white paper. They sit separately on chowkies in the formation of a circle.	Put the zen paintings in the middle, energy circle and chant	Memory, association, vocalization
20	23rd July	Memory		Games	Opening ritual and name ritual	Introduce a set 10 of sight words/ picture cards to the group in a particular order. Keep the objects in the cards random. Show them in a particular sequence a few times and later show a single card asking the question what comes next ? To prompt memory of the sequence.	Try to weave a song together using the 10 random words. To a familiar tune.	Sequential memory, cognition
21	25th July	ADL (activities of daily living)	Routine	Body-movement	Opening ritual and name ritual . Song " This is the way we brush our teeth" sung in sequence of one' s daily routine	Action words in sequence of one's daily routine. Sight word reading and enacting of these action words. A basic list of action words should be written on the board and others can be added by the children. Eg: To wake, Yawn, Brush, bathe, eat, walk, sit, play, sleep.. etc	Repeat the song improvised by using the words on the board	Fine motor skills, patience, group work

Session no.	Date	Key concept	Metaphor	Artistic Skill	Artistic Communion	Focussed Creation	Closure	Therapeutic Goals
22	28th July		Drum beats	Rhythm and voice	Opening ritual and gross motor exercises	Bring out djembes and frame drums. Start with pulse and get the children to follow simple beats using counts. Sing songs to complement the beats. Eg " Baba and gumba" and others	Put the drums away. Quiet time and breath work	Gross motor coordination, group dynamics
23	31st July		Resistance	Visual art	Opening ritual and communion - putting cello tape on the sheets in random patterns.	Using sponges and brushes, children paint the entire sheet of paper in any way they like. The paint is kept thick so that the drawing paper is covered thickly with paint. We teach the children to dab the colour onto the paper rather than a rubbing motion to keep the tape and art paper from tearing.	Wait for sometime while the paint dries, till then we wash hands and clean up. Gradually peel off the tape from the paper to reveal the resist pattern. Display the artwork.	Fine motor, sharing, buddy work
24	4th Aug	The larger picture		Visual art	Buddy work in pairs. Sitting exercises in pairs-,push pull , touch the fingers called out as if the buddy is the mirror -to establish the buddy pairs for the rest of the session.	Buddies sit separately with a large sheet of chart and one tray of maida paste paint. All buddies work separately with their own colours and later share colours if desire. They can use their hands to make designs in the paste or use ear buds, leaves etc to make prints.	All the individual charts are brought to the centre and joined using masking tape to make a large chart. If too wet to stick they can be placed together in the formation of a large square. Sing "square up" and quiet time.	Crayons, paper sheets, djembes

Session no.	Date	Key concept	Metaphor	Artistic Skill	Artistic Communion	Focussed Creation	Closure	Therapeutic Goals
25	6th Aug	Feelings		Games , Body-senses	Opening ritual and song " if your happy and you know it"	Flash cards of labeled emotions are shown in a particular sequence. All are called out and enacted for the first 2 trials. The sequence is then repeated without prompts for the children to identify and enact by themselves.	Ask how do you feel today? Encouraging them to pick up the card that they feel drawn to.	Cognition, memory, voice
26	8th Aug		Monsoon	Games, Body-senses - movement	opening ritual followed by body jamming to make rain sounds. First with hands then with newspaper. Rain songs sung	Movement to music using the paper as a prop. Then tear the paper into long strips and throw them on the floor like rain. Later collect this rain into a small pond and lay with water by throwing it up in the air and on each other. Allow interaction with each other using the strips of paper.	pick each piece of paper and place them in trays singing bits of paper. Gather around the collected paper, dry ourselves off and close with a prayer	Fine motor skill, group interaction, response to instruction, reaction time
27	11th Aug		Colourful breath	Visual art , body	Opening ritual and blowing paper balls or pieces of paper in trays	In pairs give the children paint and straws. Demonstrate blow painting. Get them to pour drop of paint on their sheet and blow it to create patterns	Clean up and quiet time	Oro motor ability, attention, buddy work and sharing

Session no.	Date	Key concept	Metaphor	Artistic Skill	Artistic Communion	Focussed Creation	Closure	Therapeutic Goals
28	14th Aug		Bucket ball	Games and exercise	Opening ritual and bouncing balls of various sizes	Make the children stand in two lines and one by one hold the ball over the head and throw it into a bucket. Each child is given three chances. All the children in the line should get a chance. Two children can be assigned on rotation to throw back the balls that fall in the bucket	stretches and quiet time	Gross motor, turn taking, group interaction
29	18th Aug		Colour and find	Visual art	Discovering hidden pictures by painting over the sheet of paper	Use wax crayons to colour on a sheet of paper, colour wash with a darker paint to make the design pop up, instructions only for the process, not the actual artwork	Clean up space and closing chant	Fine motor skill, following instructions, following sequence
30	20th Aug		Drawing beats	Rhythm and voice	Opening ritual and independent Drawing using crayons on separate sheets of paper.	Drumming in a circle. Stop-cut, pulse following using counts and songs "Gingo",	Drawing again on new sheets of paper using crayons	Voice, gross motor, lead and follow

Session no.	Date	Key concept	Metaphor	Artistic Skill	Artistic Communion	Focussed Creation	Closure	Therapeutic Goals
31	25th Aug		Body jamming	Rhythm and voice	Introducing sounds created with different body parts and labeling them.(tapping body parts, clicking fingers, tapping on thigh)	The children are blind folded and verbal commands are given for body jamming and make that particular sound	Close with Body massage	Motor coordination, lead and follow, group interaction
32	27th Aug		Lead the way, follow the path	Games	Opening ritual and open with a story of being in the jungle, arrive at a river that needs to be crossed by walking along a narrow path and jumping over rocks	Find the path drawn on the floor using coloured chalk and place obstacles along the path. Show a demonstration of how to cross the river and make each child cross, Sing "we are going on a bear hunt" improvised to the story	Find a safe spot in the jungle for quiet time	Gross motor movement, spatial reasoning, lead an follow, turn taking
33	29th Aug		Wall painting	Visual Art	opening ritual with movement using large brushes , Song " I am an artist- I can paint on the wall/ floor/ ceiling"	Using large brushes, rollers, sponge etc paint on a large sheet stuck on the wall. Trays of paint are provided and children must share the space and materials.	Clean up the space using mops and cleaning cloth. Quiet time once the space is clean.	Gross motor skills, fine motor skill, group interaction, sharing

Session no.	Date	Key concept	Metaphor	Artistic Skill	Artistic Communion	Focused Creation	Closure	Therapeutic Goals
34	1st September		Little potters	Visual art	Opening ritual. Make the kids set the session, arranging for tables, clay , banner and t-shirt with mug of water, rag cloth.	First knead the clay till it is soft then making shapes out of the clay like triangle, square, circle, oval, diamond, rectangle etc, without using a cutter. Sing shape songs " Circle up/ square up" etc	Clean up of self and space, quiet time and closing chant	Fine motor skills, cognition, attention
35	3rd September		Bean up	Games	Opening ritual and introduction to four kinds of beans. A song to remember the names of the different beans is sung.	Segregation of beans into four different bowls- individually, in pairs and in a group.	"Spill the beans" on the floor in the center of the circle on the count of three and pick them up together in bowls provided. Clear up and quiet time.	Attention, cognition, buddy work and group work

APPENDIX C

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