Enhancing Social Communication Skills in Children with Special Needs - A Comparative Group Study in the Early Intervention Unit

Rajeev Ranjan¹, Tabinda Naqvi², Swetlana Singh Gaur², Priya Mishra²

¹Assistant Professor (Sp & Hg), Composite Regional Centre for Skill Development, Rehabilitation & Empowerment of Persons with Disabilities (CRC), Lucknow, UP, India

²4th Year BASLP Internship Student, Dr Shakuntala Misra National Rehabilitation University, Lucknow, UP,

India

Corresponding Author: Rajeev Ranjan

DOI: https://doi.org/10.52403/ijhsr.20230328

ABSTRACT

Early intervention is a crucial component in assisting children with special needs to reach their full cognitive, emotional, and social potential. As early childhood is a crucial period of development for both the brain and the child's overall growth, interventions must begin at this time. Most children with special needs lack in their social and communication skills. This may be due to non-exposure to early enrolment in the play school or early intervention where they can learn from their peer. Group therapy as a part of early intervention gives better results in improving children's social communication skills. Therefore, this study aimed to see the impact of group therapy on the social communication skills of children with special needs in the early intervention unit. Twenty children, 10 males, and 10 females, aged 0–6 years, attending CDIC EIU were selected for group therapy at CRC, Lucknow. These had a provisional diagnosis of ASD, GDD, ID, and HI. Pre and Post scores were measured for the 4 selected domains, i.e., social skills, joint attention, receptive, and expressive language age by available tests and scales. Various studies show the impact of group therapy on social communication skills in children. Similarly, in the current study, the social communication of children got better with increased post-therapy scores after undergoing group therapy. The significant difference found through ANOVA was appropriate within the group and was approaching the target value among the group. Hence, this indicates a positive impact of group therapy on social communication in children.

Keywords: [Social-communication, Children, Special needs, Group therapy, ASD, Autism, Early Intervention]

INTRODUCTION

Social communication is a way to share thoughts, experiences and emotions. These skills are needed for language expression and comprehension in nonverbal, spoken, written, and visual-gestural (sign language) modalities.¹

Social communication has the following components: pragmatics, social interaction, social cognition, and language processing. Pragmatics focuses on language use in social contexts; communication occurring between at least two individuals is social interaction; social cognition is an understanding of one self's or other's mental and emotional states; language processing is the internal generation of language (expressive), and understanding and interpretation of language (receptive).¹ Social communication skills include the ability to adjust speech style based on context, understand the perspectives of

others, understand and appropriately use the rules for verbal and nonverbal communication, and use the structural aspects of language (e.g., vocabulary, syntax, and phonology).¹

Children with special needs may experience difficulties with social communication. Children with special needs (CWSN) are children who have a disability of some kind and need special assistance and care. Four key categories can be used to group the many ailments and disabilities that affect CWSN: Physical, sensory, developmental, behavioural, or emotional difficulties.²

Special needs children may have been born with a syndrome, a terminal illness, substantial cognitive disability, or serious psychological disorders. Others may have unique needs such as learning difficulties, dietary allergies, developmental delays, or panic attacks.³ They need additional support as compared to their peers. Examples of special education needs include -Social, Behavioural and emotional difficulties, Multiple learning difficulties, Moderate learning problems, Speech, communication and language needs, Autism spectrum disorders, Attention Deficit Hyperactivity Disorder (ADHD) and specific learning disabilities, multi-sensory impairment⁴

For children with special needs, early intervention is an important step towards helping the child to fulfil his or her full academic, emotional, and social potential. Early intervention refers to a process during which the developmental abilities of the child are evaluated. If necessary, a program developed that contain services is (individualized on the basis of the child's specific needs) that will help to further enhance the child's developmental skills and encourage developmental growth.³ The intervention is very important in children at early age as early childhood is a time of brain development and substantial growth in domain children.5 each of Child development research has established that the rate of human learning and development is most rapid in the early years of life.⁶

Early Intervention Services are special services for infants and toddlers at risk for developmental delays. These services are designed to identify and meet children's needs in five developmental areas. These are physical, cognitive, communication, social or emotional development, sensory and adaptive development.⁶

Group therapy can be a part of early intervention in which a group of children of same or different features or diagnosis or challenges are made to perform together for few or several sessions under the guidance of а single therapist or team of professionals. The individual therapy may have limitation on socialization, where as a group therapy facilitates a conducive social environment for children. In the group therapy session children have opportunities to practice their social interaction skills with other children of their age group in a safe environment. This enhances their confidence levels to initiate and interact with their peers.⁷

Aim and objectives:

To see the impact of group therapy on Social Communication Skills in children with special needs in Early Intervention Unit.

Objectives:

- 1. To see the impact on joint attention in the children and to compare it among the groups.
- 2. To see the impact on Receptive skills and Expressive skills and to compare them among the groups
- 3. To see the impact on Social Skills and to compare them among the groups.

MATERIALS & METHODS

20 children (10 males and 10 females) of age range 0-6 years, attending CD EIC at CRC Lucknow were selected for group therapy. These had a provisional diagnosis of ASD, GDD, ID, and HI. They were divided into 4 groups, each group comprised of 5 children.

Group A contains 5 children with ASD and ADHD, Group B contains 5 children with

GDD and DSL, Group C comprises 5 children with ID and Down Syndrome and Group D has 5 hearing impaired children who are using amplification devices. A total number of 30 sessions were taken for up to 60 minutes.

Four domains were selected and goals were set for each domain, are as follows:

- Social skills- To be able to follow Turn taking and show Greeting behaviour.
- Joint attention- To be able to be easily controlled in the group.
- Receptive language- Children are able to follow two-step related commands and identification of lexical items (e.g., fruits-apple & banana; animals- dog, cow, cat; objects-ball, table, chair).
- Expressive Skills- To be able to communicate for needs i.e., two-to-three-word utterances (person+object+give) in the day-to-day routine.

Pre and Post scores were measured by using the required administrative tests for each domain i.e., ISAA score for social skills, Reynell scale for joint attention, REELS score for receptive language age, and expressive language age.

Statistical analysis was done to compare the findings within the subjects and among the groups.

RESULT

The study aimed at seeing the impact of group therapy on Social Communication Skills in children with special needs in Early Intervention Unit.

Joint attention, Receptive language (RLA), Expressive language (ELA) and social skills (ISAA score) were assessed before group therapy (pre) and then after 30 sessions of group therapy (post). The post group therapy scores were better that pre group therapy in children with all the 4 challenges i.e., ASD, GDD, ID and HI.

Pre and Post Findings of Group Speech Therapy-

S No.	Name	SOCIAL (ISAA)		PRE-LINGUISTIC LINGUISTIC					
				(Joint Attention*)		(Receptive and Expressive Age-REELS)			
		Pre	Post	Pre	Post	RLA (pre)			ELA (post)
GROU	P A- ASD								
1	AN	103	82	Level 3	Level 4	27-30	30-33	11-12	16-18
2	DS	138	136	Level 1	Level 1	5-6	5-6	4-5	4-5
3	AI	132	117	Level 2	Level 3	4-5	6-7	3-4	4-5
4	DV	114	97	Level 1	Level 2	7-8	7-8	5-6	5-7
5	SR	90	97	Level 2	Level 3	22-24	27-30	12-14	14-16
GROU	P B- GDD								
6	MD	119	115	Level 2	Level 3	24-27	24-27	12-14	12-14
7	TR	74	59	Level 3	Level 4	24-27	27-30	12-14	16-18
8	VS	76	68	Level 3	Level 4	33-36	33-36	16-18	18-20
9	AB	87	62	Level 3	Level 4	22-24	27-30	14-16	16-18
10	AY	86	69	Level 3	Level 4	18-20	22-24	10-11	11-12
GROU	P C- ID								
11	KB	117	78	Level 3	Level 4	7-8	10-11	4-6	8-9
12	AG	97	69	Level 3	Level 4	22-24	27-30	10-12	12-14
13	BS	137	135	Level 2	Level 3	5-6	5-6	4-5	4-5
14	VB	62	56	Level 3	Level 4	3-5	9-10	3-5	8-9
15	AZ	88	75	Level 2	Level 3	6-7	6-7	2-4	5-6
GROU	P D- HI								
16	AR	87	72	Level 2	Level 3	3-4	4-5	2-3	3-4
17	AH	67	60	Level 3	Level 4	3-5	5-6	2-4	5-6
18	SH	65	63	Level 2	Level 3	1-2	5-6	1-2	4-5
19	SG	74	59	Level 3	Level 4	24-27	27-30	12-14	16-18
20	TN	86	69	Level 3	Level 4	18-20	22-24	10-11	11-12
TOTA	L AVERA	GE							
		94.5	81.9	2.5	3.5	14.8	17.38	8.2	10.8
DIFFERENCE		12.6		1.0		2.58		2.6	

*Joint attention levels:

Level 1- Can play fleeting attention but any new event will distract

Level 2- Will attend to own choice of activity but will not tolerate intervention particularly verbal. Attention is single channelled.

Level 3- Still single channelled. The child will attend to adult's choice of activity but still difficult to control.

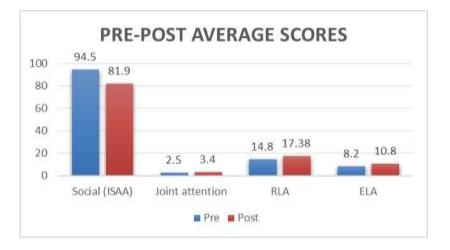
Level 4- Single channelled, but more easily controlled

Level 5- Integrated attention for short spell, attention span still short

Level 6- Integrated attention is well controlled and sustained.

The post therapy evaluation showed better results than the pre therapy evaluation for all the domains selected in every group. Total average was also calculated for each domain for every group. The difference in pre and post average for all the domains was as 12.6 for social skills, 1.0 for Joint Attention, 2.58 for Receptive Language Age and 2.60 for Expressive Language Age. Hence, it was seen that the most significant improvement was seen in social skills after the group therapy sessions.

The graphs given below show pre and post average scores of all the 20 children selected.



STATISTICAL ANALYSIS

The result of Analysis of Variance (ANOVA) showed a significant pre to post improvement in the outcome variable measured after 30 sessions of group therapy (p<0.05).

The significant difference was appropriate within the groups for all four domains selected, i.e., social skills, joint attention, receptive language age, and expressive language age, whereas the significant difference among the groups was approaching towards p value i.e., 0.05.

Within group analysis:

Social skills- The results of analysis showed appropriate significant difference within groups for social skills (f= 306.623, p<0.05).

Tests of between-subjects effects-

Joint Attention- The results of analysis showed appropriate significant difference within group for joint attention (f=414.818, p<0.05).

Receptive Language Age- The results of analysis showed appropriate significant difference between groups for receptive language age (f=77.529, p<0.05).

Expressive Language Age

For expressive language age, the results of analysis showed significant difference within group (f=127.382, p<0.05).

Between Group Analysis-

Tukey's post Hoc test was used to compare the significant difference between the groups. The results were as follows-

- 1) Significant difference between group 1 and 4 (p<0.05, CI=0.9641, 81.2359).
- 2) Significant difference between group 2 and 4 (p<0.05, CI=6.8650, 36.4350).
- 3) Significant difference between group 2 and 4 (p<0.05, CI=3.8089, 17.0911).

DISCUSSION

In our study, it was observed that all 4 domains taken i.e., Social, Joint Attention, Receptive Language, and Expressive Language showed better after the group sessions. ISAA score decreased after the group sessions which indicated reduced autistic characteristics and improved social communication skills in children. Joint attention level and receptive and expressive language age also increased after the group therapy sessions. The results of the analysis

showed a significant difference between the groups (p<0.05). However, the significant difference was approaching time and group interaction (p>0.05). Although authors are not sure that this improvement is completely due to group therapy sessions or if there are other factors also contributing to this change.

There are various studies done which show the impact of group therapy on social communication skills in children. According to Raquel Vidal. children with ADHD showed better attention skills, and significantly reduced ADHD symptoms compared to the control individual group⁸. In current study also the joint attention level in children with special needs were improved after group sessions. Numerous studies, including Kivlighan's work in Group Dynamics, have found that peer interactions may help in many therapeutic factors.⁹

R. Ranjan, K. Pradhan Ray and J. Wong mentioned in their study that all the children in the group built up their social interaction with peers. Initiation, maintenance, and completion of activities were well carried out with other children in the group. In the study they indicated that, to improve social interaction, group therapy is an effective option for children⁷. Similarly, in this study also, social communication skills of the children got better with increased post therapy.

We observed that children performed better with peers and showed improvement when they engaged in group therapy. Similarly, Davis, stated that group therapy is a method of assisting children in building up social acceptance. Children are encouraged to socialize with their peers, participate in group play.¹⁰ The most social learning, occurs through observation of others.¹¹ There are studies which reports that the larger improvement with syntax and semantics is gained by individual sessions, and progress in pragmatics and social skills is improved with the group sessions.¹² Individual therapy has a minimal impact on socialization and group interaction, according to research by Ranjan, R., Pradhan Ray, & Wong, J., ⁷. Individual therapy, in their opinion, concentrates on pre-linguistic, linguistic, and fine and gross motor abilities. Working one-on-one with the therapist, clients can establish functional communication for use in daily tasks. They concluded that they do not have the chance to develop their social interaction skills individual therapy during sessions. Similarly in the current study, authors found that the social skills improved after the group sessions when compared to their skills before the group sessions. From the current study, results also showed that the children in the groups made progress in their ability to interact socially with their peers and that they were eager to take part in activities like storytelling and various arts and crafts. Children in the older age group, however, showed better progress in social skills. This shows that the transdisciplinary approach in group therapy is an effective therapeutic method to encourage the kids to begin and engage in social interaction with their classmates¹³.

CONCLUSION

Social communication enables individuals to share experiences, thoughts, and emotions. The intervention is very important in children at early age as early childhood is a time of brain development and substantial growth in each domain of children. Group therapy can be a part of early intervention in which a group of children of same or different features or diagnosis or challenges are made to perform together for few or several sessions under the guidance of a single therapist or team of professionals. According to the finding of this study, it was observed that all the four domains (Social, Joint Attention, Receptive Language and Expressive Language) for the children with special needs showed better after the group sessions. ISAA score decreased after the group sessions which indicated reduced autistic characteristics and improving the social communication skills in children. Joint attention level, receptive

and expressive language age also increased after the group therapy sessions. As the number of sessions was only limited to 30, the authors are unsure if this improvement is entirely attributable to group therapy sessions or if other factors (such as followup at home, quality of time spent by the parents, caregiver, or attending any other schools) are also influencing these improvements.

Declaration by Authors Ethical Approval: Approved

Acknowledgement: Thank you to all of our clients and parents for your willingness to participate in the research study and Director, CRC Lucknow to carry out the study at CDEIC.

Source of Funding: None

Conflict of Interest: The authors declare no conflict of interest.

REFERENCES

1.AmericanSpeech-Language-HearingAssociation(2010)https://www.asha.org/practice-portal/clinical-

topics/social-communication-disorder/ retrieved on 30/11/22

2. "Children with Special Needs (CWSN): Definition and Categories." *Wecapable.com*. Web. July 9, 2022. https://wecapable.com/cwsncategories-of-children-with-special-needs/

3. https://specialneedsplanning.net/childre n-with-special-needs/retreievd on 30/11/22

4. www.vydehischool.com/blog/rehabilitai on/difference-between-special-needs-anddisabilities/

5. Eidelman. (2011). Early Intervention to Develop Social Interaction and Communication Skill for Children with Autism Spectrum Disorders, Advances in Social Science, Education and Humanities Research (ASSEHR), volume 58)

6. Organisation of Early Intervention Services, National Institute of mentally handicapped. https://www.niepid.nic.in/org%20erly%20bk%2 01-192.pdf /retrieved on 01/12/22

7. Ranjan, R. et al. (2014). Effect of Transdisciplinary Approach in Group Therapy to Develop Social Skills for Children with Autism Spectrum Disorder. Theory and Practice in Language Studies, Vol 4, No 8 (August 2014), 1536-1542, doi:10.4304/tpls.4.8.1536-1542

8. Raquel Vidal. (2015). Group Therapy for Adolescents with Attention-Deficit/Hyperactivity Disorder: A Randomized Controlled Trial

9. D. M. Kivlighan Jr, D. O. Cole. The Group's Absence Norm and Commitment to the Group as Predictors of Group Member Absence in the Next Session: An Actor–Partner Analysis, Journal of Counselling Psychology, 59(1), 41–49, 2012.

10. Davis RG, (1948). Group therapy and social acceptance in a First-Second grade, Elementary school journal, December 1948

11. Bandura, A. (1989). Social Cognitive Theory. In R. Vasta (Ed), Annals of child development, vol.6.six theories of child development (PP.1-60). Greenwich, CT: JAI Press

12. Sheridan, McKinzie Craig, (2012). A comparison of group versus individual therapy on the output of appropriate utterances in a six-year-old girl with autism: a case study.

13. Rajeev Ranjan, Kajal Ray Pradhan. Social interaction skills development in children with ASD: a group based comparative study. International Journal of Science & Healthcare Research. 2022; 7(2): 450-456. DOI: https://doi.org/10.52403/ijshr.20220463

How to cite this article: Rajeev Ranjan, Tabinda Naqvi, Swetlana Singh Gaur et.al. Enhancing social communication skills in children with special needs - a comparative group study in the early intervention unit. *Int J Health Sci Res.* 2023; 13(3):252-257.

DOI: https://doi.org/10.52403/ijhsr.20230328
