

Behavior Skills Training of a Caregiver of a Child with Autism

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Abstract – Teaching the correct administration of skills to the parents of children with special needs is of vital importance. Focusing on a caregiver and their empowerment by teaching the required skills to teach their children can have significant effects on the prognosis of child. Training the caregiver to teach their child can be instrumental in a country with limited number of center based services. Programs with caregiver trainings have yielded better results and outcomes for the child.

In the present study a parent was taught how to administer trials for teaching his child non-contextual instruction. The results indicated that the parent of the child was able to deliver the instruction and it was observed that the rate of acquisition of skills by a child through proper parent training was increased.

Key words: Autism Spectrum Disorder, Parent Training, Receptive Language

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1. INTRODUCTION

Neurodevelopmental disorders (NDDs) are a heterogeneous group of prevalent neuropsychiatric illnesses with various degrees of social, cognitive, motor, language and affective deficits. NDDs are caused by aberrant brain development due to genetic and environmental perturbations. Early developmental interventions have been used in the clinical setting with the aim of improving the overall functional outcome for infants.

Autism, first described by American psychiatrist Leo Kanner in 1943, is a disorder of neural development characterized by impaired social interaction and communication, and by restricted and repetitive behaviour (Kanner, 1943; APA, 2013). The Autism Spectrum Disorder is one of the most devastating neurobiological disorders of prenatal and postnatal brain development (Cook, 2001). It is important to diagnose this condition at a young age so that early intervention can be instituted to have better outcome. Although there is no cure for ASD, but there can be functional improvement in these children if appropriate treatment is given early and for a

prolonged period of time (Rogers & Vismara, 2008). Given that impairments in social and communication abilities characterize children with autism, it is imperative to identify forms of early intervention and parent training programs that are effective in promoting increased social and communication competence in pre-school children with autism.

According to Joana Prata, the parent training protocols are different than psycho-education as training is based on hands on skill training rather than theoretical knowledge base. It helps in emotional stability and sense of achievement for parents. In a study of general parent education programs to enhance behavior and adjustment in children under seven years of age, Kaminski et al. emphasized that parent training was associated with more positive outcomes in children with special needs.

According to Stoner (2005), parent's first reaction following a diagnosis is to look for information and practical advice. This response, be it immediate or gradual, brief or intense, is thought to facilitate

adjustment and adaptive coping. Searching for information may also be an alternative way of handling the diagnosis as opposed to seeking emotional support. It may help parents to respond more effectively to a range of life-changing events that may invoke stress (Starke and Möller, 2002; Stoner, 2005). It may also give parents a greater sense of empowerment in managing daily routines and activities as well as increase family adaptation. Lovaas first emphasized the importance of parent training programs after noting that following intensive treatment, children whose parents were trained on the intervention continued to improve, as opposed to children who returned to an institutional setting and lost previously acquired skills. The aim of the present study was to empower a parent to help child with autism by training him to teach one-step instruction using behavioral skill training steps.

2. METHOD:

2.1 Participant:

The participants included child and his father. The diagnosis was done using DSM V criteria. Childhood autism rating scale (CARS) and developmental assessment was done using bayley scale of infant and toddler development. His composite scores on different domains were: Cognitive: 55 Language: 46 Motor: 74. His rating on CARS was 34.5 indicative of mild-moderate autism spectrum disorder.

2.2 Setting and Materials:

The study was conducted at Child Development Clinic a multidisciplinary center for children with special needs in New Delhi. The materials included paper, pen and bag. The baskets consisted of different preferred items (objects, toys and eatables). Bubbles were identified as the most preferred item during preference assessment. Training sessions for parent were conducted for three days after the baseline for his skill was taken. Total 11 sessions were included in the study.

2.3 Procedure:

2.3.1 Experimental Design:

An AB design was used, where A refers to the baseline phase (non-treatment) and B refers to the intervention (training) phase. The dependent variable consisted of the independent correct sequence of steps followed by parent as taught to him. Independent variable is the training.

2.3.2 Baseline

For Parent Training:

During baseline sessions, the parent was asked to perform the steps by the trainer. The number of

independent correct steps was recorded. It was noted that in the baseline parent couldn't complete the sequence of steps for teaching nose. The duration of baseline was for 3 sessions done over 2 days with 10 trials each set of 5 steps.

For child training by parent, the baseline and the acquisition of skill by the child was recorded. Correct administration of the skills was recorded as well as the maintenance for the same.

2.3.3 Intervention

During the intervention phase the parent was taught the correct sequence of steps to teach the one step instruction using modeling technique and use of physical prompts and the topography of which was defined. The following procedure was taught using behavior skills training of outlining the procedure, modeling, role play and feedback as:

SD – Prompt – Approval From Parent – SD-Independent Response From Child –Reinforcer delivery. Trial by trial data was recorded in every session.

2.3.4 Data Collection:

After each baseline, experimental and maintenance trial the trainer recorded whether the participant followed correct sequence of steps to teach the child.

2.3.5 Interobserver Agreement:

A second observer independently viewed the at least 50% of the records from the each phase of the experiment 100% from baseline sessions, 80% from the intervention sessions and 100% from the generalization sessions and took data about the target behavior. The same observational sheets were completed that were used by the trainer.

Interobserver agreement was calculated for each phase by dividing the sum of agreed observations with the sum of the agreed and disagreed observations, all multiplied by 100.

$$\frac{\text{sum of agreements}}{\text{sum of agreements} + \text{sum of disagreements}} \times 100$$

The agreement was:

For Baseline phase, IOA = 100% (15/15*100)

For Intervention phase, IOA = 80% (12/15*100)

For Generalization phase, IOA = 100% (15/15*100)

3. RESULTS:

The results of the intervention are presented in Figure 1. During baseline parent was not able to do the steps for teaching the one step instruction (0%). In the first intervention and second intervention session he was able to steps of sessions at 40% and 60%. In the third session the parent was able to complete all steps with 100% accuracy.

Table 1:

No. of Sessions	Trials	% age acquisition
1	0/5	0
2	0/5	0
3	0/5	0
4	2/5	40
5	3/5	60
6	5/5	100
7	5/5	100
8	5/5	100
9	5/5	100

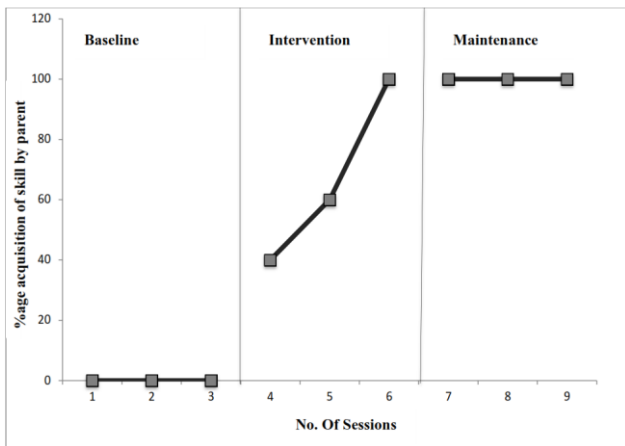


Fig 1: Graph representing %age acquisition of steps by parent

Table 2:

Sessions	Trials	% age acquisition
1	0/5	0%
2	0/5	0%
3	0/5	0%
4	1/5	20%
5	1/5	20%
6	2/5	40%
7	3/5	50%
8	4/5	80%
9	5/5	100%
10	5/5	100%
11	5/5	100%

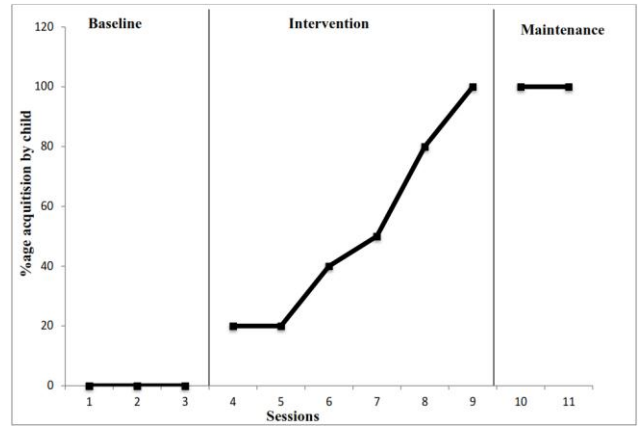


Fig 2: Graph representing %age skill acquisition by child

Figure 2 represents the acquisition of the skill by the child. In the baseline the child wasn't able to identify body part nose. The parent as taught did the intervention to him. The administration of steps for teaching was done accurately. In the intervention phase the child was able to give correct response at 40% and then 60 % and then in the final sixth session 100%. Maintenance was done for two sessions and the child was independently able to follow the instruction.

DISCUSSION:

Behavior skills training is an effective procedure to teach a parent of a child with special need. It showed how an empowered parent could effectively translate the skills to the child. The results call for more research in the field of training the trainers, as parents are the first contact to their children. In the present study non-contextual one step instruction was taught to a parent. He then administered the same to the child. It was seen that the acquisition of one-step instruction by a child was fast and the parental motivation was increased to learn more and teach more to the child. Understanding language is a basic requirement for communication. Children with autism and other developmental disorders have the difficulty to comprehend language. Teaching them receptive language becomes first line of defense and the same is necessary for expressive speech and hence so crucial for socialization. Parent empowerment was the main aim behind the study, which was accomplished. The study calls for more research to understand the effectiveness of teaching a parent of a child with special needs further more complex programs using behavior skill training approach.

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