



## Special educational Intervention for Children with Intellectual disability having Autism

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### ABSTRACT

*The purpose of the study was to find out the effectiveness of special educational intervention for children with intellectual disability having autism . Pre-post designing is used .The main objectives is to study the efficacy of special educational intervention on a select sample of children with intellectual disability having autism. The intervention was provided individually with age wise distribution of sample (N-13, M-11, F-2). Screening was done by administering psychological tests like (DST), (VSMS), (BKT).Children below IQ 70 were administered (ISSA) . FACP (pre interventional-test) was administered to children having mild and moderate ID having autism. Special educational intervention package was planned and executed for target group. The intervention was implemented individually along with home based training. The raw scores obtained were tabulated and analyzed using paired t-test for finding the statistical significance of the intervention. Findings suggest that the proposed procedure is an effective method .*

**KEYWORDS :** Special education, Intellectual Disability, Autism

### Introduction

Autism is a developmental disorder characterized and diagnosed by behavioral symptoms that mark impairments in social and communication behavior along with a restricted range of activities and interests. Autism is a heterogeneous and complex disorder impacting many areas of development including intellectual, communication, social, emotional, and adaptive functions (Makrygianni & Reed, 2010) which also present considerable challenges to both the individual and their family across their lifespan.

Autism can often be reliably detected by the age of 3yrs, and in some cases as early as 18 months. Studies suggest that many children eventually may be accurately identified by the age of 1yr or even younger. The appearance of the any of the warning signs of autism is reason to have a child evaluated by the professional specializing in these disorders.

Although autism has probably always been part of the human condition, its discrete identification is relatively recent. There are no medical tests for diagnosing autism. It is based on the observation of certain behavior in specific areas. However, because of the behavior associated with autism are shared by other disorders, various medical tests are conducted to rule out or identify other possible causes of the symptoms being exhibited (Baird et al 2000).In India, there are only a few professionals, who trained to diagnose the condition. Most diagnostic centers use a multidisciplinary approach and then team includes a psychologist, a special educator, a speech and language therapist, an occupational therapist and in some cases a pediatrician.

Cicero, F.R& Pfadt, A.(2002) investigated the effectiveness of a reinforcement-based toilet training procedure on three children diagnosed with autism. Findings suggest that the proposed procedure is an effective

Bellini,S. (2007) examined the effectiveness of school-based social skills interventions for children and adolescents with autism. The results suggest that social skills intervention have been minimally effective for children with autism.

Jaime Ann Dequinzio, Dawn Buffington Townsend, Claire L.Poulson (2008) studied the effects of forward changing and contingent social interaction on the acquisition of complex sharing responses by children with autism. Results indicated that systematic increase in responding occurred for all four participants in the presence of the training stimuli.

Bishop et al. (2013) investigated the use of stimulus fading without escape extinction to increase compliance with tooth brushing in three children with autism. Results demonstrated increased compliance with clinician implemented tooth brushing and generalization to caregivers for all participants.

Analysis of the studies and the review shows that greater attention is

required for comprehensive special educational Intervention for children with intellectual disability having autism .Hence the need for the present study.

### Objectives of the Study

1. To plan and execute special educational intervention on a select sample of children with ID having autism.
2. To study the efficacy of special educational interventions on a select sample of children with ID having autism.

### Method of data collection

The study was conducted at National Institute of The Mentally Handicapped Manovikas Nagar, Secunderabad. Simple random technique was used. Total sample was 13 children with mild and moderate ID with autism. The sample consist of 11 males and 2 females of which 8 under the age group of 6-9 years, 5 under the age group of 9 to 12 years, and 3 with Mild ID with Mild autism, 1 with Mild ID with Moderate Autism, 8 with Moderate ID with Mild Autism, 1 with Moderate ID with Moderate Autism.

### Procedure and Administration

#### (a) Screening Stage:

- In the first phase total 500 children who were newly registered cases at general services block at NIMH were screened out to identify cases with ID by administering Developmental screening test (DST) and Vineland Social Maturity Scale(VSMS), Binet Kamat Test Of Intelligence(BKT)(Purposive sampling method was used for data collection and a semi structured interview was conducted). Compiling the scores of DST, VSMS, and BKT the IQ is obtained. Children above IQ 70 were ruled out.

#### (b) Testing Stage :

- In the second phase children below IQ 70 were administered Indian Scale For Assessment Of Autism (ISSA), the interview with individual lasted for 10-15mts
- Total 13 children with mild and moderate ID with autism were included, children with severe and profound ID with autism were excluded from the study. The sample consist of 11 males and 2 females of which 8 under the age group of 6-9 years, 5 under the age group of 9 to 12 years, and 3 with Mild ID with Mild autism, 1 with Mild ID with Moderate Autism, 8 with Moderate ID with Mild Autism, 1 with Moderate ID with Moderate Autism.
- In the third phase Functional Assessment Check list (FACP) (pre interventional-test) was administered on selected ID children having autism.

### Interventional Package

- ▲ After identifying ID children with autism, individualized special educational intervention package was planned and implemented with

the help of parents, siblings, and family members . Special education assessment and programming is done using FACP checklist followed with individualized educational program( IEP) .Which includes programming in two domains, Personal and Academic area. From domains each 2 objectives were selected and task analysis was written. Special educational strategies like promptings (physical prompting, verbal prompting, modeling, cuing, fading) etc and differential reinforcement techniques were used. The intervention was implemented individually at general services Block at NIMH along with home based training. The intervention was implemented for a period of 3 months carried out in 35 sessions, each session lasted for 35-45mts.

**Significant Results of the study**

Based on the two main objectives of the study ,the pre and post test scores were analysed using paired “t” test after the intervention .Results indicate as follows.

**Effectiveness of Special educational intervention as measured on Functional Assessment Check list (FACP)**

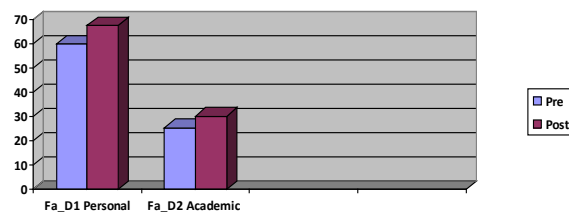
Functional Assessment Check list (FACP) consist two domains (a) Personal (D1 Per) (b)Academic(D2 acd)

**Effectiveness of Special educational intervention scores comparison on measure of FACP**

**Table 1: Indicates Special educational intervention-scores on FACP domains, the mean, SD and the t-value were calculated and analyzed**

Pre (n=13)			Post (n=13)		t - Value (df=12)	Significance level
Domains	Mean	Std. Deviation	Mea	Std. Deviation		
Fa_d1Per	60.085	18.9759	67.54	17.043	7.421	P<0.01
Fa_d2acd	25.46	17.9783	30.22	17.3246	9.608	P<0.01

**Figure 1 : Shows the Special educational intervention mean scores on Functional Assessment Check list (FACP)**



An analysis of the results shows that there is increase in scores in personal and academic domains after intervention which are highly statistically significant , these results are similar to the findings of a variety of behavioral programs that have been developed as explained earlier .For instance similar study reported by Cicero, FR& Pfadt , Al.(2002) investigated the effectiveness of a reinforcement-based toilet training procedure designed rely on a combination of a basic operant principles of positive reinforcement and punishment. Procedures included a combination of positive reinforcement, graduated guidance, scheduled practice trails and forward prompting, findings suggest that the proposed procedure is an effective and rapid method ,which can be implemented within a structured school setting with generalization to the home environment. The above results showed the effectiveness of special educational intervention for children with intellectual disability having autism.

**Conclusion**

The present study concluded that Special educational intervention program is effective in teaching and enhancing capabilities in personal and academic sphere of children having intellectual disability with autism.

**REFERENCES**

1. Barid, G., Charman, T., Baron-Choen, S., Core, A., Swettenhomj J., Wheelwright, S. and Drew, A. (2000) A screening instrument for autism at 18 months of age: A 6-year follow-up study. *Journal of the American Academy of Child and Adolescents Psychiatry*, Vol(39)( 6),(pp 694-202). | 2. Bellini,S.(2007).A meta-analysis of school based social skills intervention for children with autism spectrum disorder. *Remedial and Special Education*, Vol.28(03) May/June,(pp 153-162 ). | 3. Cicero, FR and Pfadt,AL. (2002). Investigation of a reinforcement based toilet training procedure for children with Autism. *Research in Developmental Disabilities*. Vol.1 23(5), Sep/Oct , (pp 319-331) . | 4. De Quinzio,J.A., Townsend,D.B., Claire ,L.P., (2008). The effect of forward chaining | and contingent social interaction on the acquisition of complex sharing responses| by children with autism .*Research in Autism Spectrum Disorders* Vol. 2, issue 2 , | April/June, (pp 264-475). | 5. Functional Assessment Checklist for Programming .Department of Special Education, | National Institute for the Mentally Handicapped(NIMH) Manovikasnagar, | secunderabad-09, A.P.India. | 6. Indian Scale for assessment of Autism .NIMH –Test Manual, National Institute for the | Mentally Handicapped(NIMH) Manovikasnagar, secu nderabad-09, A.P.India. | 7. Kamat,V.V., (1958). *Measuring Intelligence of Indian Children*. Oxford University | Press, Bombay. | 8. Kurth, J., Mastergeorge, A.M. (2010). *Individual Education Plan Goals and services for adolescents with Autism: Impact of Age and Educational Setting*. *The Journal of Special Education*. Vol.44(3) (pp 146-150). | 9. Malin,A.J. *Vineland social Maturity Scale*. Published by Indian Psychological | Corporation, Shanti sadan, Raj Behari Lal Road, Lucknow. | 10. Michale R.Bishop et al.,(2013). Using stimulus fading without escape, extension to increase compliance with tooth brushing in children with autism. *Research in autism spectrum disorders* , Vol 7, issue 6,June 2013,(pp 680-686). | 11. Raj, J.B., (1983). *DST manual + Know Your Child's Intelligence and How to Improve It*. Published by Smt.Padmalaatha Bharathraj, Swayamsiddha Prakashana.720,16th Main Road, Saraswathipuram, Mysore-570 009, India. | 12. Schopler, E., & Dalldorf,J. (1980). *Autism: definition, diagnosis, and management*. | *Hospital Practice*, 15, 64-73. | 13. Smith, D.D., (2004). *Introduction to special education* . 5th edition: Pearson | publication . (pp 415-444). |