

Efficacy of Early Customized Behavioural Intervention on Children with Autism

by Kadambari Naniwadekar

| | | | |
|----------------|------------------------|-----------------|-------|
| FILE | DR_KADAMBARI.DOC (78K) | | |
| TIME SUBMITTED | 21-JUL-2016 01:39PM | WORD COUNT | 2098 |
| SUBMISSION ID | 690871032 | CHARACTER COUNT | 12223 |

Part -A

1.0 Title of the Project: Efficacy of Early Customized Behavioural Intervention on Children with Autism.

Area of Research :

a) Interdisciplinary

1.1 Principal Investigator: Dr. Kadambari Naniwadekar

1.2 Principal Co-Investigator(s): Shobha B N

1.3 Co-Investigator: Dr. Amrita Kanchan

4

1.4 Collaborating Institution: NA

1.5 Total Grants Required: 4, 40, 000. Four Lakhs and forty thousand only
(in figures and in words)

1.6 Duration of the Project: Twelve Months

2.0 Project Summary (Max. 300 words)

This project aims towards finding out the efficacy of Customized Behavioural Intervention provided at an early age on Children with Autism. The program aims to help parents/caregivers/educators in management of their child's all round development. The program focuses mainly on increasing skill/ adaptive behaviours and consequent decrease of Problem Behaviours. The sample of the study will be Children with Autism between the age ranges of 3-6years.

The duration of the project will be for one academic year and will be carried out at the Department of Special Education. A training manual in English consisting of activities, techniques and materials to be used for improving skill behavior in children

with autism will be prepared. The manual will be validated by the experts in the field of disability. A baseline of selected sample will be collected using ACPC-DD checklist and Problem Behaviour Survey Schedule. As a part of intervention customized behavior plans will be prepared for each child and administered for a period of 3 months. Post data will be collected and analyzed to check the effectiveness of the Customized Behavioural Intervention Program. The manual may later be translated to Kannada, Hindi and Malayalam.

3.0 Introduction

3.1 Definition of the problem:

Autism Spectrum Disorder (ASD) is characterized by repetitive and restrictive interests, problems with communication, and impaired social functioning (APA,1994). ASD affects 1 in 68 individuals (CDC, 2014). Although no cause has been identified, many behavioural theories of ASD describe it as a social disorder. Although people with autism share a range of core symptoms, the severity and the exact nature of symptoms displayed varies widely. All individuals with autism share a range of behavioral characteristics, the extent of individuals deficits, and the impact these have on their learning vary greatly. many recent researches have talked about teaching skills and reducing inappropriate behavior for people with autism involving variety of behavioural techniques based upon operant and respondent learning. Some of these behavioural interventions included A. Making environmental changes, such as providing structure and reducing distraction in teaching situation. B. Using specific prompts and prompting strategies. C. repeated practice behavior. D. Employing reinforcement for correct response. E. Decreasing behavior through reinforcement manipulation. F. Implementing naturalistic teaching. G. Using task analysis, chaining, shaping H. Planning for generalization and maintenance. I. Exposing children to typical learning environment.(Cooper et.al.2006:foxx 1982 a, b)

A multitude of therapies and remediation protocols are being made available for the parents, caregivers and the affected children with

3
autism. Some of the well-known and copyrighted programs to list a few are Strategies for Teaching based on Autism Research (STAR), Discreet Trial Training (DTT), Pivotal Response Training (PRT), Picture Exchange Communication System (PECS), Positive Behaviour Support (PBS) etc.

A variety of educational interventions have been developed as a means of remediating the characteristic deficits of autism. Although these vary widely in the terms of underlying philosophy and teaching methods employed, a general consensus exists that intervention should start in the pre-school years, focus on teaching a range of skills, and take place for a minimum of 25 hours per week.

8
A very few interventions have shown results of effectively dealing with problem behaviours, in children with autism. However, there is an increasing consensus among the experts that prevention of such problems should be main focus, particularly during early childhood and preschool years. There is also growing consensus that most effective form of prevention of problem behaviours is the provision and implementation of appropriate Individualized Education Plan based on proven interventions.

While there is no justification to assume that children with autism can or will have inherently more problem behaviours than their other unaffected age peers, there are grounds to suspect that such children are misunderstood by their adult caregivers or parents. The biggest source of confusion in this regard may stem from the fact that problem behaviours in the child remains undistinguished from behavioural manifestations owing to their primary disorder itself.

Another need for distinguishing skill behavior deficits from problem behaviours especially in children with autism is that the plan, procedure and programme for interventional management are different for the two types of behaviours. A skill behavior insufficiency is best resolved by use of techniques that teach the child a new set of behaviours. On the other hand, the identification and management of problem behaviours typically follow a different route. It involves use of operant techniques that extinguish or exchange such unwanted behaviours for more acceptable ones.

Yet another need and justification for attempting distinction between skill behavior deficit and problem behaviours in the context of children with autism is that the problem behaviours may themselves be the consequence of developmentally age inappropriate programming, wherein these children are indiscriminately targeted for teaching higher level developmental skills before their mastery of lower level pre requisite skills, the consequences can be disastrous. They end up showing problem behaviours like inattention, refusal, negativism, temper tantrums etc.

Professionals and rehabilitators working with these children with autism having behavioural issues are interested to find out techniques by which such behaviours can be handled or modified. The present study is therefore designed to find out the effect of customized behavioural intervention on children with autism.

3.2 Objectives

- To make a baseline severity profile of skill behaviours in a group of children with autism.
- To carry out an individualized case by case topological mapping of situations, triggers, antecedents, functions, maintaining aspects and consequences for the identified problem behaviours.
- To evolve an individualized and/or small group behaviorally based skill training program.
- To implement the evolved individualized and/or small group based behavioural intervention strategies.
- To undertaken a terminal evaluation of the intervened different types and specific instances of problem behaviours.

7 3.3

1 Review of status of research and development in the subject

Research suggest that children with autism benefit from intensive, early intervention that focuses on increasing the frequency, form and function of communicative act. Available evidence shows that highly structured

behavioral methods have important positive consequences for these children, particularly in eliciting first words. However, the limitations of these methods in maintenance and generalization of skills suggest that many children with autism will need to have these methods supplemented with less adult directed activity to increase communicative initiation and carry over learned skills to new settings and communication partners. Providing opportunities mediated peer interaction with trained peers in natural settings seems to be especially important in maximizing the effects of this intervention.

In the study by Waters and Healy 2012 the results showed that frequency of self injurious behaviors and co-occurring behaviours all have a negative impact on social skill. In the study the results also demonstrated that when social skills increase, both hostile and inappropriately assertive behavior increase and vice versa.

Researchers have found that many factors contribute to the onset and maintenance behavior problems. Intellectual level reportedly appears to be correlated with repetitive behaviors in individuals with autism. Turner, 1999 found that behaviors such as insistence on sameness unusual attachment to objects repetitive language and confined interest are more likely to be observed in higher IQ individual whereas behaviours like stereotypies, manipulation of objects and self injurious are more common in individuals with lower IQ.

Currently, although there is no definite cure for autism, but research suggests that it can be managed with a combination of behavioural, educational, drug and biological interventions (Rimland, 1994b; Gresham, Beebe-Frankenberger, & MacMillan, 1999). There are number of treatment approaches available for individuals with autism. Regardless of the treatment approach, it is important that the intervention begin at an early age for best prognosis. An early start to intervention and individualization of services has been identified in many reports as a key to successful interventions (Iovanone, Dunlap, Huber, & Kincaid, 2003).

Customized Behavioural Intervention or Person Centered Planning as called in other countries, is a process of identifying goals and implementing

intervention plans (O'Brien, Mount, & O'Brien, 1991; Smull & Harrison, 1992). It is in contrast to traditional program-centered planning, in which individuals with disabilities are provided with pre existing services that a particular agency has. In customized intervention, the specific needs and goals of individuals drive the creation of new service matrices that are tailored to address the unique characteristics of the individual. As person centered planning seeks to empower individuals with disabilities, it almost invariably leads to focus on self determination.

3.4 International and national status

National – As per the recent reviews there are no such programs in India, wherein customized behavioural or educational interventions based upon the specific needs and requirements are carried out.

International - As per reviews collected through various sources and as mentioned in the previous sections it is found that there are a few programs which focus on person-centered intervention. But there no programs which work upon skill and problem behaviours simultaneously.

3.5 Importance of the proposed project in the context of current status

As per the finding of the reviews it can be seen that there are no or a few researches and early intervention programs in India which work on customized behavioural intervention, the project will be one of its kind

7
4.0

Work Plan

4.1 Method

Subjects / Participants: 20 Children with moderate to severe Autism in the age range of 3 to 6 yrs.

Inclusion Criteria:

- (a) Children in age group of 3-6years with equal representation for gender;
- (b) Children diagnosed as 'Autism Disorder' based on ICD-10-CM official criteria (WHO, 2012) by a clinical psychologist;
- (c) Children with at least 8-10 skill deficits and problem behaviours

as reported by primary caregivers irrespective of their frequency, type or severity and as recorded at baseline during sample recruitment in this study on a standardized tool for identification of such behaviors.

3.5 Exclusion Criteria:

- (a) As distinguished from the primary autistic disorder, children with expressive language disorder, mixed receptive-expressive language disorder, mental retardation, socialized/socialized disturbances of emotion-conduct, social anxiety, reactive attachment disorders of infancy and early childhood, disinhibited disorder of childhood, child abuse and neglect, habit disorder, and/or related medical conditions like Angelman Syndrome, Cornelia de Lange Syndrome, Landau Kleffner Syndrome, Hyperlexia, etc.
- (b) Children receiving structured behavior based therapy along the same lines from any other place at the time of the study.

Material: ACPC-DD (Venkatesan, S. 2003) for assessing the skill behaviours in children with autism.

Problem Behaviour Survey Schedule (Venkatesan.S., 2013) for assessing problem behaviours in children with autism.

Procedure:

1. **Assessment of children:** The children selected for the study will be assessed for their baseline scores on ACPC-DD and PBSS.
2. **Listing of Skill Deficits:** Based on the baseline scores received list of skill deficits will be prepared in consultation with the teachers and parents.
3. **Development of Customized Behaviour Intervention Plan:** Based on the information listed above Customized plans will be made and

administered on each child as a part of pilot study. A cross-over design will be used for the study.

After receiving the baseline scores, children will be divided into two groups namely: control and experimental. Individualized plans will be made for each child in the experimental group, based on the specific needs of the child. the therapy will be administered on each child for 1 hour daily. The children will again be assessed on the skill and problem behavior checklist in the mid-course (after 3 weeks of intervention). After analyzing the scores and making modifications, if any, treatment will continue for next 3 weeks. The customized behavior intervention plan will be administered for a period of 6 weeks.

Subsequently the assessment will be carried out for the control group also and check for changes in their skill behaviours.

After 6 weeks of intervention for the experimental group, they will not be provided with any intervention for next 6 weeks, while the control group will be given the therapy and assessed for improvements, if any.

Audio- Visual recordings of the therapy program will also be carried out simultaneously.

4. **Post data collection:** Post test will be done after administering the intervention plan for 6 weeks.
5. **Analysis and Interpretation of data:** The data hence collected will be analyzed and interpreted to check the efficacy of the Customized Behaviour Intervention on treating children with autism using appropriate statistical measures.

Efficacy of Early Customized Behavioural Intervention on Children with Autism

ORIGINALITY REPORT

| | | | |
|------------------|------------------|--------------|----------------|
| 19% | 14% | 13% | 11% |
| SIMILARITY INDEX | INTERNET SOURCES | PUBLICATIONS | STUDENT PAPERS |

PRIMARY SOURCES

| | | |
|----------|--|-----------|
| 1 | callierlibrary.wordpress.com Internet Source | 5% |
| 2 | docslide.us Internet Source | 3% |
| 3 | Venkatesan, S.. "A Growing Trend in Pseudo-Diagnosis: A Field Study on Children Frequently Mistaken for Autism in India", Psychological Studies, 2015. Publication | 3% |
| 4 | Submitted to All India Institute of Speech & Hearing Student Paper | 2% |
| 5 | Gabriels, R.L.. "Repetitive behaviors in autism: relationships with associated clinical features", Research in Developmental Disabilities, 200503/04 Publication | 2% |
| 6 | www.bacb.com Internet Source | 2% |
| 7 | www.aiishmysore.in Internet Source | 1% |

8

Submitted to Higher Education Commission
Pakistan

Student Paper

1%

9

www.psychologynet.org

Internet Source

<1%

10

www.beachcenter.org

Internet Source

<1%

EXCLUDE QUOTES ON

EXCLUDE MATCHES < 7 WORDS

EXCLUDE
BIBLIOGRAPHY ON