

Inclusion and Behavioural Modification Techniques for Children with Autism: A Case Study

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Abstract

Inclusion is a sense of belonging, feeling respected, valued for who you are, feeling a level of supportive energy and commitment from others so that you can do your best work (Miller and Katz, cited in Handbook of Inclusive Education, C.B.S.E.). Inclusive education means placing children with special needs and abilities along with mainstream children as far as possible. This helps the children to develop a sense of belongingness, promotes confidence, imbibes the value of cooperativeness and appreciate the variety existing in human resources concerning talent, belief and background. Each teacher uses interventions to help children to excel and this is especially applicable to special needs children. To cater to the individual needs of students, individualized education programme (IEP) is made which is a planned document developed by a team for an individual child. The present study was conducted on three autistic children studying at Drishti Dr. R. C. Jain Innovative Public School, Ludhiana, to see the effect of specially designed interventions on the behavioural aspects of these children. Applied behaviour Analysis, communication support, social skill training, structured routine and

picture exchange communication system. The study showed marked improvement in social communication, expressive and receptive language and self-care.

Keywords: Inclusion; Inclusive education; Individualized Education programme; Strategies for autistic children

1. Introduction

Everyone in the age group of 6 to 14 years has the right to education as per the “Right of Children for Free and Compulsory Education (2009) Act”. The Indian Government has come a long way from the Integrated Education for Disabled Children (IEDC) programme in 1974 to the Persons with Disability Act in 1995. The target for achieving Education for All (EFA) by 2010 has accelerated the importance of Inclusive Education. Education denotes that all children irrespective of their strengths and weaknesses will be a part of the mainstream education (Singh, 2016). Inclusion is a sense of belonging, feeling respected, valued for who you are, feeling a level of supportive energy and commitment from others so that you can do your best work (Miller and Katz, cited in Handbook of Inclusive Education, C.B.S.E.).

1.1. Background and Context

Inclusive education means placing children with special needs and abilities along with mainstream children as far as possible. This helps the children to develop a sense of belongingness, promotes confidence, imbibes value of cooperativeness and appreciate the variety existing in human resource with respect to talent, belief and background. Inclusion aims at bringing all children with different abilities and needs together to learn under one roof (Handbook of Inclusive Education, C.B.S.E.).

1.2. Individualised Education Programme

Each teacher uses interventions to help children to excel and this is especially applicable to special needs children. In order to cater to the individual needs of students, individualize education programme (IEP) is made which is a planned document developed by a team for an individual child. IEP also includes (Ruble, L.A., McGrew, J. and Jung, L.A., 2011):

- Child’s present level of performance.
- Measurable annual goals.
- The tools for measuring the child’s progress.
- The tailor-made teaching strategies help the child to progress as per his/ her capability.

The three Tiers of interventions at academic and behavioural levels are:

Tier 1: Universal or core instruction

Tier 2: Targeted or strategic instruction/ intervention

Tier 3: Intensive instruction/ intervention

Interventions involve skill building strategies that are designed to move special students to more advanced academic levels (Watson, 2019). There is lot of literature available for general guidance regarding planning of interventions, however, there are very few studies on specific interventions.

The present study was conducted to see the effect of specially designed interventions on behavioural aspects of children with autism.

1.3 Autism Spectrum Disorder

Autism Spectrum Disorder (ASD) is a neurodevelopmental disorder characterized by a range of challenges in social communication, behaviour and restricted interests. It is termed “Spectrum” as individuals with ASD can present a wide variety of symptoms and skills leading to diverse experiences and levels of support needed. These children besides having repetitive and routine behaviour may demonstrate over or under sensory sensitivity which can affect their daily functioning. Some of them also show exceptional skill in certain areas like music, art, mathematics while facing challenges in other areas.

It is really difficult for autistic children to understand social norms and engage with peers leading to their potential isolation. They feel overwhelmed or even get aggressive when their routines are disrupted.

While there are many techniques through which the challenging behaviour can be reduced and more functional behaviour can be learnt, the “BEHAVIOURAL INTERVENTION” technique is most commonly used. In behavioural intervention technique, the antecedent factors leading to certain behaviour and its consequences are identified. It is also pertinent to understand that the challenging behaviour is what we see as a result of deficits in the areas of social skills and communication. Functional behavioural assessment has to be carried out which helps us to:

- Understand the cause of behaviour
- Determine the environmental factors that may influence the behaviour
- Guide the direction of intervention plan

1.4. Objectives

The child engages in a certain undesirable behaviour to escape a non-preferred activity or gain the attention of others or get some tangible things. It may also be to fulfill a sensory need or reduce discomfort. There are various ways of identifying disruptive behaviour like systematic observation, antecedent behaviour - consequence chart, reinforcement preference survey, and interviewing the caregiver.

The cases of autistic children under study are a part of the inclusive setup of a school and are taken up with the objective:

1. To identify the stereotypic behaviour leading to challenges in social communication, expressive and receptive language and self-care.
2. Designing interventions to reduce stereotypic behaviour which is leading to challenges in social communication expressive and receptive language and self-care.
3. Elucidate the impact of interventions on social communication, expressive and receptive language and self-care.

2. Methodology

The present case study was conducted on three children with Autistic spectrum disorder. The children are studying at Drishti Dr. R. C. Jain Innovative Public School. Data was collected from April 2024 to January 2025 through systematic observation.

3.1. Research Observations

Social communication, expressive and receptive language and self-care were limited or absent for the three cases under study. Stereotypical behaviour led to challenges in learning. The stereotypic behaviour leading to challenges in the three cases under study are as follows:

Case 1

Age: 7 years

Motor and Sensory stereotypic behaviour: The child demonstrated hand movements, jumping, running around, running away from the classroom, twisting and turning objects, and repetitive movements with objects. He liked sticky substances which compelled him to peel off things to satisfy the sensory need.

Case 2

Age: 6 years

Motor and Vocal stereotypic behaviour: The child emits sounds, repeats words, and scripts, and sings over and over again while doing any work. He approaches his hands to people to touch them with a hidden motive to seek attention. He also has a habit of taking off his shoes and crawling.

Case 3

Age: 10 years

Motor stereotypic behaviour and hyperactivity: Hyperactivity is expressed by hitting others as well as self, slapping and pushing others. The child has messy eating habits and removes clothes. He wears diapers and has no toilet training.

3.2. Functional Behaviour Assessment

Functional behaviour assessment was carried out to understand the reason for a repetitive atypical behaviour which is to escape or gain attention or seek tangible things or for sensory needs. It helped in understanding the environmental factors which led to the consequent behaviour. Based on this assessment the interventions were planned. Several intervention strategies have been implemented to address these behavioural and developmental concerns.

3.2.1 Applied Behavior Analysis (ABA)

It has been one of the primary interventions. ABA focuses on reinforcing positive behaviors and reducing undesirable ones through structured methods. Primary reinforcer (identified through preference assessment) were used initially after every desired behaviour followed by pairing tangible and activity rewards with secondary reinforcer of praise. The First -Next-Then strategy gave results in reducing stereotypic behaviour.

Prompting in the order Tell – Show - Do was used.

TELL: Instruct the child such as “put your toys back”, and wait for a few seconds for the child to comply, if the child complies at that point provide a huge reinforcement (verbal praise, clapping, favorite food).

SHOW: Repeat the instruction by modeling or gesturing what you want the child to do, e.g., repeat the instruction “put your toys back like this” and simultaneously pick up a few toys and put them away, again wait for a few seconds for the child to comply, if the child complies at this point provide reinforcement but to a lesser degree, if they don't then move to 'Do'.

DO: Physically prompt the child to complete the behavior of putting the toys back. Provide very neutral praise afterward such as “Okay that's done”.

3.2.2 Communication Support

The children were given speech therapy to enhance their verbal communication skills, with a focus on increasing clarity in sound.

Structured Routine and Visual Supports: A consistent routine has been implemented throughout the school day to provide the children with predictability and reduce anxiety. This routine is visually supported with schedules and cues to guide the child's actions and transitions between activities. Visual supports (e.g., pictures, charts, or tokens) are used to reinforce expectations for behavior and communication.

Picture Exchange Communication System (PECS): Picture Exchange Communication System (PECS) is amongst the most commonly used techniques with children who have little or no verbal ability. Therapists, teachers and parents help the child build a vocabulary and consistently articulate desires, observations and feelings through pictures. Children with nonverbal autism need some mode of communication. They express their needs by pointing towards the desired objects or dragging the teacher to the area of interest. In situations when these strategies do not work or are not feasible, what alternative do they have? They may start screaming, getting restless, and getting frustrated. It's not always possible for parents to understand what their child wants. So, if the child has the option to select his desired item from a set of pictures, then it would be easy for the teacher or caregiver to understand the child's need, and automatically the child's frustration will be reduced.

3.2.3 Sensory Integration Therapy

The Case 3 child has negligible verbal ability and was trained in this technique for expressing his needs. Given the child's hyperactivity and possible sensory sensitivities, sensory integration therapy was introduced. This therapy helps the child regulate their sensory needs through activities such as deep pressure, swinging, or using fidget tools. This has helped reduce excessive movement and has made it easier for the child to remain focused during structured times.

Toilet training: A strict schedule of toilet training was followed and recorded. Water was given to the child and after 15 minutes, the child was taken to pass the urine. Within a span of 1 month the child learnt to take off diaper, use the pot to urinate and pull back the diaper and pants.

Physical Routine: A well-established routine of gross motor activities was set for these children in the morning followed by structured physical activity in the last 30 minutes of the school time.

Parent and Teacher Collaboration: A collaborative approach involving both parents and teachers have been established. The parents are provided with strategies and resources to reinforce the same goals at home, ensuring consistency. Teachers also maintain clear communication with the child's therapists to monitor progress and adjust interventions as needed.

4. Positive Impact

Since the introduction of these interventions, the children have shown several positive changes:

Reduction in Running Behavior: The frequency of the child running away from the classroom has decreased significantly. With consistent application of ABA techniques, physical activity and visual schedules, the child is learning to express his need for movement and reducing the need to escape the classroom.

Improved Social Interactions: While still a work in progress, the children have made noticeable improvements in initiating and maintaining brief social interactions with peers. They have started engaging more during group activities and responding to instructions while looking into the eye for a few seconds.

Enhanced Communication Skills: The children's communication abilities have progressed with speech therapy. Two of them are able to use simple phrases to express needs and can follow basic directions with visual support. While verbal communication remains a challenge, the children are more confident in expressing themselves using a combination of verbal and non-verbal communication.

Better Classroom Engagement: There has been a marked improvement in the children's ability to stay focused in class. The hyperactive behavior has been managed through sensory activities and structured breaks, allowing them to engage in lessons for longer periods without significant disruptions.

Parent and Teacher Satisfaction: Both parents and teachers have observed the children's growing ability to function within the classroom setting and social environments. Teachers report that the children are more integrated into group activities, and parents have noted improved behavior at home, particularly in terms of following routines and managing frustration.

5. Conclusions

The intervention plan for this child has shown promising results, with observable improvements in behaviour, social skills, and communication. Continued support through therapy, structured routines, and individualized strategies will be crucial in furthering his development. Collaboration between school staff, therapists, and family members will continue to ensure a consistent and holistic approach to support the child's needs.

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