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Building Learning Readiness Skills in a Child with Autism

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Abstract

Autism is a masterpiece of puzzle, with the unique lens to see the world. Autism spectrum disorder (ASD) is prevalent yet challenging to diagnose in Eastern collectivistic culture (Atherton, et.al., 2023), as the children are often shy and hesitant to communicate and interact with people. ASD is a developmental disorder caused by an abnormality in the brain (Hirota, & King, 2023). Children with ASD often face challenges with social interactions and communication and also exhibit repetitive behavior. Social interactions and communication include challenges with verbal and nonverbal abilities, as well as difficulties interpreting social indications and conventions. Repetitive behaviors are odd behaviors characterized by the recurrence of inflexibility, inappropriateness, and a lack of modification (Martínez-González, et.al., 2022). A child with ASD sometimes lacks learning readiness skills, are the observable traits that are significantly required for the children to follow early instructions, interact with the environment and develop the vital life skills (Karatas, et.al., 2021). For autistic children, the assessment plays a vital role recognizing in ASD as developmental assessment is a procedure that uses a variety of modalities to evaluate the performance of a child. To deal with the problems that can be assessed an intervention plan was developed based on the presenting problems, observations, and the use of developmental assessment tools. It can be designed by using the techniques of behavioral modification that show favorable consequences to reduce problematic behavior. The study aims to highlight the significance of employing behavioral modification techniques in improving learning readiness skills in the children with ASD.

Key Words: Autism, Learning Readiness Skills, Attention Span, Eye Contact, Developmental Assessment.

Case presentation

A child was of 6 years old girl, who belonged to a low socioeconomic status and resided in a nuclear family system with a total of seven members, which included her parents and five siblings. The girl was admitted to the special education school of Lahore at the age of 5. Her teacher made the referral to assess and manage her concerns related to lack of attention, weak eye-hand coordination, not maintained and established eye contact, non-compliance and stubbornness. The information concerned the prenatal, perinatal, and postnatal history revealed that her birth was considered premature as she was of 33 weeks (7



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months and 3 weeks) through normal delivery and her weight was below the average for an infant. Significant evidence was found regarding her parent's consanguineous marriage. Additionally, up until the age of 12 months, she did not experience weight gain, and there was no increase in height. Additionally, she struggled to hold her neck and maintain a side position. After several tests, she was diagnosed with delayed milestones by a doctor. It was mentioned that in the postnatal stage, she experienced epileptic seizures. She was suffering from myopia with congenital strabismus, requiring the use of glasses since birth, but was diagnosed at the age of 3. The child's provided history has a significant impact on her delayed milestones such as, head held at the month of 12, sitting at 18 months, walking at the age of 2.5, single-word speech when she was 4 years and not having bladder and bowel control, which causing an age discrepancy that led to underdeveloped learning readiness skills, significantly affected her attention concentration, eye-contact, poor eye-hand coordination and non-compliance. there was no physical or psychiatric illness. The child began attending school at the age of 5.5 years in 2023 and has been consistently enrolled in a special education school. As per her teacher's observations, she exhibited no interest in any activities or toys and refrained from participating in playful activities. According to her teacher, she tended to be lost in her zone and she lacked social reciprocity, she spoke only a single word after a lot of effort. In various class activities, she appeared restless while switching the task and didn't engage with other teachers or peers.

Different developmental assessments had been carried out on the child to assess her presenting problems such as Behavioral observation by using participant and non-participant observation techniques, in different settings (classroom, sports time, music time and the dining room including individual sessions) that show she looked diminutive than other children of the same age group and eyes are strabismus. The client didn't establish and maintain eye contact. Also, her hand-eye coordination was weak and deficit attention span. Regarding communication, her speech consisted of single words and was not entirely clear, characterized by low volume and pitch. Furthermore, her fine motor skills were underdeveloped, as she faced challenges in performing tasks. It was noted that she consistently sat in the same chair and occasionally rocked her body back and forth, often accompanied by a smile. Notably, she exhibited eye-twitching behavior alongside these actions. She appeared inactive and disengaged in her activities.

Also, Clinical interviews from the teacher and perceived rating showed the severity level of the symptoms as the teacher rated attention, eye-contact on 9 out of 10, non-compliance on 8 out of 10, eye hand coordination and stubbornness on 7 form 10. Also Baseline chart for attention, and eye contact displayed she cannot give eye contact to objects and tends to become distracted by minor sounds also the baseline chart of stubbornness indicated her tendency to resist may be because of her fixed rigid patterns.

The formal evaluation of the presenting problems included, the Childhood Autism Rating Scale (CARS) the outcomes revealed Mildly-Moderately Autistic traits. Also, the Screening tool for differential diagnosis of Autism and MR score suggested an indication of autism spectrum disorder (ASD) and Functional checklist for initial assessment as the client is below the functional level of PGEE illustrated the client's prerequisites, including Learning Readiness Skills, were not developed. She also faced challenges in major domains such as socialization,



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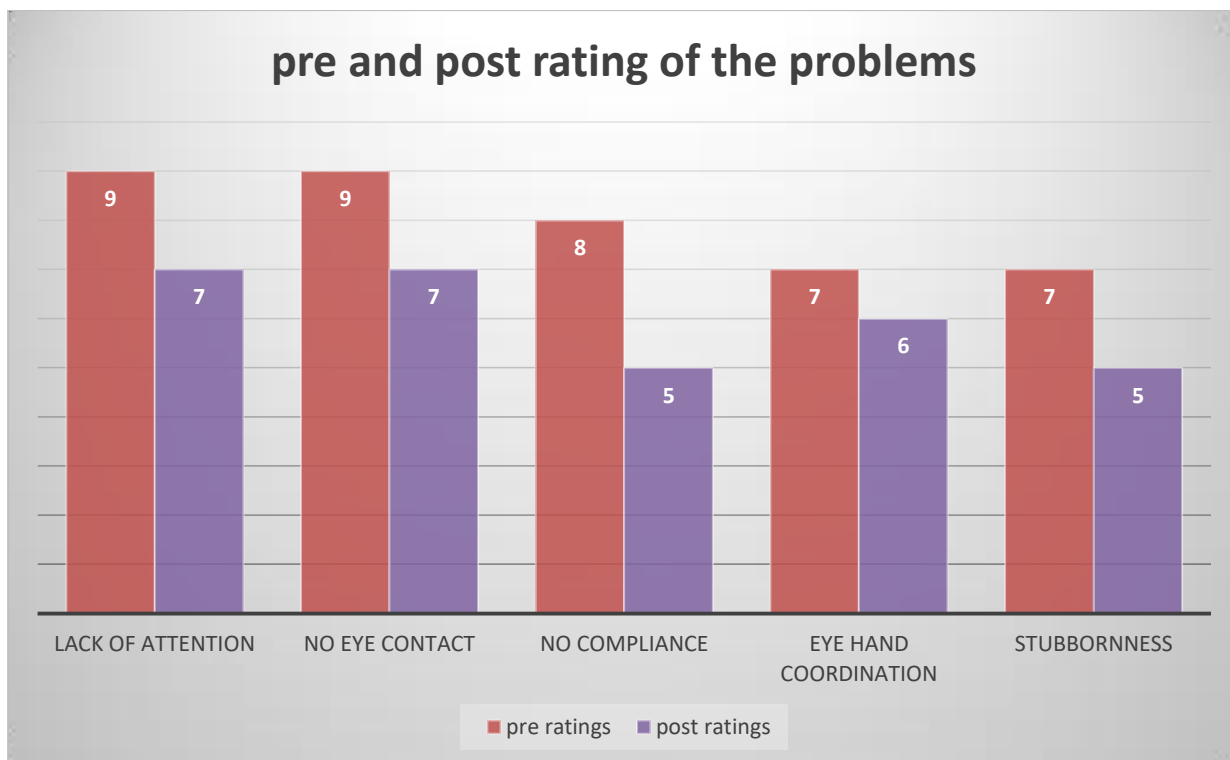
cognition, communication, and self-help skills. The prognosis was considered favorable with appropriate support and intervention. Total number of sessions were 12.

The intervention plan was designed to address the child's issues comprehensively by using different behavioral techniques such as increasing the attention span of the child at least for 60 seconds by the technique of multisensory approach, prompting, and positive reinforcement with the activities like putting colorful sticks in the egg tray and color-board scribbling. The goal was to maintain and establish eye contact with the objects and therapist at least 30 seconds by the activities pop the bubbles, follow the lighting ball and putting probes on the mouth with technique of positive reinforcement, prompting and paired with positive Association. Another goal was addressed by modelling, positive reinforcement and prompting to increase the eye-hand coordination of the child with the activities fitting the blocks and putting popsicles in the cups. Imitation was learnt by prompting, modelling and positive reinforcement by using a rhyme 'clap your hands' on this child was prompted to clap. The positive reinforcement such as high-ten to the psychologist or giving the reinforcer was used for the goals of non-compliance and reducing stubbornness of the child.

Table 1: The following goals are assessed and managed for the client's problems.

No	Goals	Assessment	Management
1	Increased attention for 60 seconds	her 60 seconds attention towards the activity	Child pay more than 50 seconds of attention towards the activity
2	Maintaining and establishing eye contact for 30 seconds	The child displays no eye contact with the activity or therapist	The child displays eye contact with few activities and therapist at 4/5 trails
3	Improving Eye-hand coordination	She has no orientation to put things correctly	she developed orientation to put things correctly 4/5 trails
4	Increased Imitation	Her imitations were delayed	She can Imitate immediately on verbal prompts at 70%
5	Improved Compliance	The child was moderately non-compliant towards the therapist	The child displayed more compliance towards the therapist with verbal prompts and reinforcers 90% of the times

Table 2: Pre and post rating of the presenting problems of the child



Note; 10 = most problematic, 0 = least problematic

Discussion

The present case study targeted to serve as evidence for the worth of Behavioral Modification Techniques, which improve a child with autism's learning readiness skills. However, the distinctive features of Autism in a child are repetitive behaviors such as body rocking, and eye twitching, also lack of socialization and the absence of reciprocal communication facilitated a forthright diagnosis (Uljarević, et.al., 2022). Before discussing the importance of management strategies, it was significant to conceptualize the case. In the existence of previous literature,

A psychological understanding of the case, symptoms, and history, encompassing biological, psychological, and social factors, structured around the 4Ps. The child has presented complaints of stubbornness, non-compliance, attention, eye-hand coordination and eye contact. Predisposing factors contributing to vulnerability include the parent's cousin's marriage, which makes her vulnerable to her present problem (Sarker, & Hossain, 2024), and her premature birth and below-average birth weight compared to a typical infant also make the child susceptible towards developing the ASD (Applegate, et.al., 2024), the epileptic fits and low socioeconomic status also increase the risk of her problems (Buckley, & Holmes, 2016). Additionally, precipitating factors that trigger these issues involve developmental delays, contributing to delayed speech and underdeveloped Learning Readiness Skills (SIEGEL, et.al, 1988). Maintaining factors include an unsupportive home environment (less parental attention) and a low economic status, which may exacerbate the child's challenges (Herrera, et.al 2024). On the other hand, protective factors, acting as resources to cope, include the school's and teachers' supportive behaviors, which can positively influence the child's development and well-being. Literature proved that all these factors make the



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child vulnerable towards autism.

The symptoms rating of the client's problem was reduced and therapeutic interventions brought a change in the client's behavior. The client's teacher was taught to generalize all techniques in her daily routines and gradually fade the prompts. The teacher was requested to provide feedback on the changes observed from the pre-management to post-management stages. According to the teacher's report, the child has shown mild to moderate improvement in her presenting complaints shown in Table 2. She also showed satisfaction towards the efforts of the clinical psychologist by identifying the weak areas of the child. Hence, behavioural modification techniques help in enhancing learning readiness skills in a child with autism.

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