



## CHILDREN WITH ASD - APPRAISAL

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### ABSTRACT :

*Autism Spectrum Disorder (ASD) is a severe, chronic development disorder, involving marked retardation of aptitudes for social interaction, communication and play (APA, 2002). Some activities are biologically driven or reflexive. But for the most part, the activity occurs because it serves a function and/or produces an outcome. Eating serves the function of satisfying hunger, and covering our ears softens the impact of the loud noise. Seeing someone cover his ears, even when did not find a noise to be offensive, can communicate that they are particularly sensitive to sound. Children on the autism spectrum see and process the world differently than children who don't. Children with autism don't always behave as the same way. Autism may present with more characters than others. Person with ASD doing different activities such as making odd noises, repeating phrases over and over, closing and opening doors in a repetitive fashion, might not be dangerous or destructive. And when the individual is told to stop again and again but still doesn't, those little things can lead to big things. They may also have a harder time in socializing and understanding social cues than other children. The parents, teachers and their classmates are how can help them without knowing what autism is, or without knowing how to stop the activities. Before the identification of autism among children, it needs thorough knowledge of the nature and activities of ASDs. The peculiar characteristics of ASD can be changed through proper training. This paper explains about the characteristics of children with ASD with evidence of reviews.*

**KEYWORDS :** Autism Spectrum Disorder, social interaction, communication skill.

### INTRODUCTION :

"Autism, a poorly understood condition, is now considered a pervasive developmental disorder because children who are autistic are challenged by a range of impairments in the normal development of communication, social and cognitive capacities."

- Cohen, Donnellan and Paul (1987)

Autism spectrum disorder (ASD) is a severe, chronic development disorder, involving marked retardation of aptitudes for social interaction, communication and play (APA, 2002). Because of the range of symptoms, this condition is now called ASD. It covers a large spectrum of symptoms, skills, and levels of impairment. ASD ranges in sternness from a handicap that somewhat limits an otherwise normal life to a devastating disability that may require institutional care.

"Autism" was first classified by Kanner (1943). Kanner applied the term 'autism', which means an absorption in the self or subjective mental activity, to refer to the extreme condition of disturbance in emotional contact with others. Subsequently, autism was recognized as a distinct syndrome of severe

disturbance that arises in infancy or early life. This evolution from “infantile autism” to ASD has also been an ongoing source of confusion among clinicians and parents. Broadly, the field has been struggling with what constitutes the boundaries of autism and there are ongoing controversies on precisely what constitutes autism and ASD (Swedo et al., 2012).

### TYPES OF AUTISM SPECTRUM DISORDER

Early identification of ASD helps children get the services they need. There is no “cure” for ASD, but there are several interventions that can help children learn important skills that improve everyday life. Typically, the earlier children are diagnosed and receive services, the better their outcomes are. Children with ASD can learn and succeed in the classroom and beyond. In the *DSM-IV-TR*, under “Disorders Usually First Diagnosed in Infancy, Childhood, or Adolescence,” five ASDs are listed: Asperger’s disorder, Pervasive developmental disorder, childhood disintegrative disorder, Rett’s disorder and Classical autism disorder (Mangal, 2007).

**Asperger’s disorder:** It is a neurological developmental disorder; describing the person having difficulties with social interaction, restricted interests, and stereotyped and repetitive behaviour in the absence of significant cognitive and language delays (American Psychiatric Association, 1994). Asperger’s disorder was considered to be a milder form of autism (Attwood, 2007). Wing (1997) described its features as having: lack of empathy, native, inappropriate, one sided communications, emotionless repetitive speech and poor non-verbal communications. Johnson (2005) reported that persons with Asperger’s disorder tend to socially isolate themselves; they lack empathy and intuition, and find it difficult to read facial expressions and body language.

They might have poor eye contact and unusual ways of speaking. Someone with Asperger syndrome may have problems with humour and have difficulty understanding simple jokes. Someone with Asperger syndrome will show almost obsessive interests in specific activities. They might be experts on something like astronomy or mathematics. Intent on understanding how things work, a mechanic with Asperger syndrome would work diligently to fix a car.

**Pervasive Developmental Disorder NOS (NOS = not otherwise specified) (PDD-NOS):** PDD-NOS or atypical autism is often used as synonyms. It is used to classify people who do not fit into any particular category of autism. They meet some of the criteria for classical autism, but not necessarily all. Their impairments could range from mild to severe requiring support ranging from anywhere between Level 1 to Level 2. Functioning level is usually moderate to high, barring exceptions where they overlap with other disorder syndromes (Gillberg & Coleman, 2000).

PDD-NOS appears when children exhibit severe and pervasive impairment in several areas of development including social skills, communication, or repetitive or stereotyped behaviour, interests or activities. Children with these types of problems must appear distinctly diverse from other children of their age. Many children with PDD may have normal or above average intelligence.

**Childhood Disintegrative Disorder (CDD):** CDD, also known as Heller’s Syndrome is very rare one and typically affecting toddlers and pre-schools. In this case, the child grows normally until the age of 2 and then shows a sudden drop in social, communication and behavioural skills (Veague, 2010). CDD is often overlooked initially by the parents as they tend to attribute this sudden impairment as a ‘transient and temporary’ phase for their child and would expect it to pass away.

**Rett’s Disorder (RD):** It occurs only in females. Girls with RD appear normal upto first five months. Problems begin to emerge between five months and four years of age, during which head growth slows down and motor and social skills may be lost (Veague, 2010). Girls with RD suffer from significant communication impairment. Also, one of common symptoms of RD is the girl’s limited ability to use their hands for regular activity. Typically this syndrome deteriorates with the girls’ age, thus requiring more support and time.

**Classical Autism (CA):** Among all the various types of autism, CA is perhaps the broadest and most predominant forms of autism. In technical terms, anyone showing autistic tendencies that satisfy the

guidelines laid out by “DSM - 5 Autism Spectrum Disorder” is termed *autistic*. The effects of autism in such people may range from mild to very severe. Research has shown that the brain of a child with autism has a far more number of electric impulses than any other normal brain of similar age. Most people with autism also have a learning disability. This is often referred to as a high-functioning person with autism.

### CHARACTERISTICS OF CHILDREN WITH AUTISM

The most widely accepted criteria for autism are contained in the Diagnostic and Statistical Manual of Mental Disorders, Fourth edition Text Revision (DSM-IV-TR; APA, 2002). According to this resource, autism has three central defining characteristics, namely: i) Qualitative impairment in reciprocal social interaction, ii) Qualitative impairment in verbal and nonverbal communication and in imaginative ability, and iii) Markedly restricted and repetitive repertoire of behaviour, activities, and interests.

*Qualitative impairment in reciprocal social interaction:* First, they exhibit problems in social interaction that begins very early. Many of them are socially unresponsive, fail to track people visually, avoid eye contact, exhibit an ‘empty’ gaze and fail to respond to others with emotional expression and positive effect. During childhood, aloofness and disinterest are noticed. They ignore others, fail to engage in co-operative play or seem overly content to be alone (Volkmar et al., 1997).

They have impairments in recognizing, comprehending and responding to social emotional stimuli. Normal development requires children to understand that persons exist and that they are both like and different from others. Such knowledge arises out of interactions with others. Hobson (1993) emphasizes that affect plays a crucial role in interpersonal understanding and it is very important for human functioning. The children with autism have deficits in executive functioning also (Ozonoff, 1997). Several studies have reported increased levels of fears and phobias among children with ASD as compared to typically developing peers (Matson & Love, 1990). Individuals with ASD display differences in social behaviours, including fears and phobias, due to abnormal functioning of the amygdala.

*Qualitative impairment in verbal and nonverbal communication :* Secondly, the children with autism have disturbed communication, both verbal and nonverbal. Even though these deficits are subtle, they strongly suggest a specific problem in understanding social and emotional stimuli, such as emotional expressions in the faces of other people. These children use fewer nonverbal signals and project an ‘expressionless woodenness’ (Attwood & Hermelin, 1988). Deficits in ‘joint attention interactions’ are also noted. Both comprehension and expression of spoken language is problematic. The comprehension of language is sometimes found to be delayed and sometimes it is short of specific language disorder. They remain mute or rarely say more than words or simple phrases. Their babbling and verbalizations are abnormal in tone, pitch and rhythm. These deficits may persist into adolescence and adulthood. The use of odd words or phrases is common. Echolalia and pronouns reversal are also common. Echolalia is a type of vocal stereotypy (Charlop et al., 1998). There are both immediate and delayed forms. The most notable impairment of language is in pragmatics, that is, the social use of language. The children with autism include irrelevant details in conversations, interrupt, shift inappropriately to another topic and fail to develop conversation.

A small minority of autistic population exhibits cognitive skills (splinter skills), which are inconsistent with their general intelligence. Some of them show amazing savant abilities. Pring and Hermelin (1993) reported that spectacular memory, mathematics, calendar calculations, work knowledge and music and art talents are displayed by some autistic children. These abilities often emerge early in life, without training and without obvious inheritance.

Many research findings indicate that some aspects of the language of people with ASD, such as the development of vocabulary and sentence structure, are indeed eventually fairly normal. However, there are often problems with other elements of communication, such as speech patterns, misunderstanding idioms, humour, sarcasm, and other non-literal meanings of spoken language, talking too much and disregarding cues from the conversational partner and having difficulty maintaining a conversation (Klin et al., 2000).

*Markedly restricted and repetitive repertoire of behaviour, activities, and interests:* The third primary difficulty of autistic children is a typical and bizarre behaviour which is described as restricted, rigid, obsessive, repetitive or stereotyped activities or interests, aggression, outbursts, temper tantrums and hyperactivity. Some stereotyped motor behaviours often reported are rocking, toe-walking, whirling, and arm, hand or finger flapping (Klinger & Dawson, 1996). It should be mentioned here that these behaviours are not specific to autism. But they interfere with learning and adaptation and hence require good management.

The children with autism have neurological abnormalities such as motor clumsiness, tremor and abnormalities of gait, posture and reflexes (Minshew et al., 1997). In many cases, higher than average head circumference and brain volume have been found (Piven et al., 1996 a). Abnormalities are also noted in various other locations of the brain.

Restricted and repetitive behaviours are a core symptom of ASDs (Brian, et al., 2011). Restricted and repetitive behaviours and interests, together with social-communication impairments, are the core diagnostic domains of ASD (ICD-10, World Health Organization 1990). Restricted and repetitive behaviours represent an extremely heterogeneous group of behaviours and whilst most children with ASD will show these behaviours at some point during their development, not all children will demonstrate these pervasively (Walker et al., 2004). This symptom domain has been conceptually and empirically grouped into at least two categories "lower order" and "higher order" behaviours (Szatmari et al. 2006). There is evidence that the presence of repetitive behaviours can negatively impact the learning (Koegel & Covert, 1972).

Research provides evidence that these behaviours also affect family functioning and wellbeing, often leading to increased stress levels (Bishop et al., 2007). Feeding activities, including food refusal, texture restrictions, and non medically based behaviours such as choking and expulsion has been noted among children with ASD. In fact, Leo Kanner's seminal work in 1943 listed feeding difficulties as a key trait. Sleep disturbances, including parasomnias and dyssomnias, among children with ASD have been widely noted (Williams et al., 2006). It is estimated that 44–83 percent of children with autism have comorbid sleep disorders (Polimeni, et al., 2005). Stereotypes are highly repetitive rhythmic motor activities that are topographically invariant and appear to have no adaptive function (Rapp, 2007). Stereotype occurs in both motor and vocal forms. Aggressive nature includes responses such as kicking, screaming, pinching, hitting, and property destruction. A variety of environmental variables may control aggressive behaviour including consequences, such as escape, attention, and automatic reinforcement (Turner, 1999).

### HELPING TO IMPROVE THE ASD CHILD'S NATURE

Any technique doesn't work for all children, however, many of the following techniques to reduce tantrums, increase understanding, following direction and happiness will work for many children whether or not they have autism (Kelly, 2018).

**Using time to decrease transitional tantrums:** Many children have trouble to leave preferred places and activities. This behaviour is one of the big problems. Sometimes they scream and fall to the ground, or try to run into a busy street to get away from parents or teacher. The child may need a 5 minute 2 minute 1 minute warning before there is a change of activity. These warnings assist the children prepare for the changeover.

**First/Then:** Many of the other tantrums are over wanting something they can't have at that moment. A teddy bear, a sweet, a trip somewhere right now or there is something they don't want to do. For many of these situations using first/then will be meaningful. This exercise is used to help a child finish a task before getting something motivating. It's a simple phrase that provides information in a child's mind and helps them follow the directions at hand.

**Reward for positive behaviour:** Reinforcing language identifies and affirms childrens' specific positive actions and encourages them to continue their appropriate behaviour. It's specially important to

recognize the behaviours that a child usually struggles with sharing, being quiet, following directions. With these words, the adult lets the children know that their positive behaviours were noticed.

### IMPLICATION

Every person being a part of society is praiseworthy of inclusion and due respect. The society should include people with autistic disorder as a community and encourage self-advocacy among them to work with others. Challenging activities are more likely to appear when a person is feeling unhappy or unhealthy. Medical concerns, mental health issues or sensory responses that we cannot be seen might bring pain or discomfort to a person with autism that might not be understood, as they are unable to say so. Behaviour differences that autism brings in people with this disorder calls for specialized approaches.

A thorough knowledge of autistic behaviour is useful for behavioural assessment and treatment. This knowledge base helps for leading researchers and clinicians discuss major theoretical perspectives on general issues in behavioural development and problems confronting autistic youngsters and adults. Teachers play a vital role in interaction with a child during the early years of their school life. Moreover, the primary teacher must be aware about characteristics of autism disorder, so their ability to pick out children with autism in the classroom will be beneficial on a long term to meet the needs of the growing number of students with autism and take the necessary action to assist them. The general education teachers and special education teachers should gain knowledge about implementation of educational practices crucial for the improvement of students with autism. The policy makers could frame may rules and regulation for the improvement of these students. Special training to the primary school teachers and special instrument for teaching could also be provided for the wellbeing of these students.

### REFERENCE

- American Psychiatric Association, (2002). *Diagnostic and statistical manual of mental disorders DSM-IV*. (4<sup>th</sup> ed.), Washington.
- Attwood, T. (2007). *The complete guide to asperger's syndrome*. Philadelphia, Jessica Kingsley Publishers.
- Attwood, A., & Hermelin, B. (1988). The Understanding and use of interpersonal gestures by autistic and Down's Syndrome children. *Journal of Autism and Developmental Disorders*, 18, 241-257.
- Bishop, S. L., Richler, J., Cain, A. C., & Lord, C. (2007). Predictors of perceived negative impact on mothers of children with autism spectrum disorder. *American Journal of Mental Retardation*, 112(6), 450–461.
- Brian A., Stephen, G., & James, W. (2011). Evidence-based behavioural interventions for repetitive behaviours in autism. *Journal of Springer Science*. 42,1236–1248.
- Charlop-Christy, M. H., & Haymes, L. K. (1998). Using objects of obsession as token reinforcers for children with autism. *Journal of Autism and Developmental Disorders*, 28.
- Cohen, D.J., Donnellan, A.M., & Paul, R. (1987). *Handbook on autism and pervasive developmental disorders*, MD: V.H. Winston Publication.
- Gillberg, C., & Coleman, M. (2000). *The Biology of the autistic syndromes* (3<sup>rd</sup> ed.). London: Mac Keith Press.
- Hobson, R. P. (1993). *Autism and the development of mind*. Hillsdale, NJ: Erlbaum.
- Kanner, L. (1943). Autistic disturbance of affective contact. *Nervous Child*, 2, 217-250.
- Kelly, C., (2018). Five tips that helped improve my child's behaviour. *Autism Speaks Inc*.
- Klin, A., Volkmar, F. R., & Sparrow, S. S. (2000). Introduction. In A. Klin, F. R. Volkmar, & S. S. Sparrow (Eds.), *Asperger Syndrome* (pp. 1–21). New York: Guilford Press.
- Klinger, L.G. & Dawson, G. (1996). Autistic Disorder. In E.J. Mash & R.A. Barkley (Eds.). *Child psychopathology*. New York: Guilford Press.
- Koegel, R. L., & Covert, A. (1972). The relationship of self stimulation to learning in autistic children. *Journal of Applied Behaviour Analysis*, 5, 381–387
- Minshew, N.J., Sweeney, J.A. & Bauman, M.L., (1997). *Neurological aspects of autism*. *Handbook of Autism and Pervasive Developmental Disorders*. New York: John Wiley.

- Mangal, S. K. (2007). *Educating the exceptional children: An introduction to special education*. New Delhi, PHI learning private limited Publication.
- Ozonoff, S. (1997). Causal Mechanism of Autism: *Unifying Perspectives from an Information Processing Framework*. *Handbook of autism and Pervasive Developmental Disorders*. New York: John Wiley.
- Polimeni, M.A., Richdale, A.L., and Francis, A.J. (2005). A survey of sleep problems in autism, Asperger's disorder and typically developing children. *Journal of Intellectual Disability Research*, 49, 260–268.
- Piven, J., Arndt, S., & Andreasen, N. (1996a). Regional brain enlargement in autism: A magnetic resonance imaging study'. *Journal of the American Academy of Child and Adolescent Psychiatry*, 35, 530-536.
- Rapp, J. T. (2007). Further evaluation of methods to identify matched stimulation. *Journal of Applied Behavior Analysis*, 40, 73–88.
- Swedo, S. E. , Baird, G. , & Cook, E. H. (2012) . Commentary from the DSM-5 workgroup on neurodevelopmental disorders. *Journal of the American Academy of Child and Adolescent Psychiatry*, 51, 347 – 349
- Turner, M. (1999). Annotation: Repetitive behaviour in autism: A review of psychological research. *Journal of Child Psychology and Psychiatry*, 40, 839–849.
- Veague, H.B., Collins.C., & Levitt, P. (2010). *Autism*. Chelser house publication Volkmar, F.R., Klin & Cohen, D.J. (1997). *Diagnosis and Classification of Autism and Related Conditions: Consensus and Issues*. *Handbook of Autism and Pervasive Developmental Disorders*. New York: John Wiley.
- Walker, D. R., Thompson, A., & Zwaigenbaum, L. (2004). Specifying PDDNOS: A comparison of PDD-NOS, Asperger syndrome and autism. *Journal of the American Academy of Child and Adolescent Psychiatry*, 43, 172–180.
- World Health Organization. (1990). *International classification of diseases*. Geneva, Switzerland.
- Wing, L. (1997). *Syndromes of autism and atypical development: Handbook of Autism and Pervasive Developmental Disorders*. New York: John Wiley.
- Williams, S. K., Scahill, L., & McDougle, C. J. (2006). Risperidone and adaptive behaviour in children with autism. *Journal of the American Academy of child & Adolescent Psychiatry*, 45(4), 431–439.