



How does Autism Spectrum Disorder (ASD) affect a child? Dr Avril V Brereton

What are the core features of ASD?

In 1943, American psychiatrist Dr. Leo Kanner introduced the word “autism”, derived from the Greek word ‘auto’ or ‘self’ to describe 11 young patients who all had what he called three core features of autism:

- an inability to relate to people and situations
- failure to use language for the purpose of communication
- obsessive desire for the maintenance of sameness in the environment.

In 2013, the American diagnostic criteria changed and the term Autism Spectrum Disorder (ASD) was described². Although the new ASD criteria have combined communication and social deficits into one new domain, the symptoms remain largely the same as Kanner’s first description of autism.

We will now look at how ASD affects a child’s:

- social interaction and response to others
- communication with others
- play, interests and behaviour.

Social interaction

All children with ASD have some difficulties with how they relate socially to others, however this can change as the child grows older. It is not simply the case that children with ASD do not develop social relating skills. It is more true to say that the quality of the relationship is different.

Reduced interest in people, an appearance of aloofness and a limited ability to relate to others are some of the most common features of ASD in the early years³.



Infants with ASD may not put out their arms to be picked up when mum or dad approach. They may not seek physical comfort when upset or hurt and it may be hard to soothe them when they are crying. They may show very little variation in facial expression in response to others, and generally have unusual eye contact. Learning to engage in social imitation such as waving bye-bye is often slow. Children can develop an ability to understand that other people have feelings, but this often has to be taught. They may not want to play with or develop friendships with other children.

Communication

Children with ASD usually have delayed and disordered language. Parents of children with ASD may be concerned and seek help because their child is developing language slower than usual. Most children with ASD who do not have functional speech by the age of 7 years will continue to have severely impaired communication⁴. In those children who

do develop speech, the pattern of development is unusual. Tone, pitch and modulation of speech is sometimes quite different and the child's voice may sound mechanical and flat. Some children speak in whispers or too loudly, or develop an unusual accent.



Abnormal use of words and phrases is a common feature of ASD. Echolalia (repetition of language spoken by others) is one of the most noticeably unusual aspects of speech. It can be either the immediate repetition of what has just been said, or the delayed repetition of phrases. Some children repeat advertising jingles, or large pieces of dialogue from DVDs or conversations they have overheard, for no apparent reason. Young children with ASD may confuse or reverse pronouns (you, me, I). Some children make up their own words for objects and people. Difficulties with language comprehension (receptive language) are often also present. Their understanding of spoken language can be literal and they fail to understand

underlying meaning and metaphor such as “shake a leg”, or “pull your socks up”.

Children with ASD who develop a wide vocabulary and expressive verbal skills may still have difficulty with the pragmatic or social use of language. They may have trouble initiating a conversation and maintaining the “to and fro” of a conversation. The child with ASD is more likely to talk *at* you rather than *with* you. They may also interrupt and talk out of context and use speech as a means to an end rather than to engage in a social conversation.

Play, Interests and Behaviour

Children with ASD usually have rigid and limited play with a lack of imagination and creativity. They may repetitively line up toys, sort by colour, or collect various objects such as pieces of string, special stones or objects of a certain colour or shape. Intense attachment to these objects can occur with the child becoming upset if these objects are taken away or moved. Children may develop play that appears to be creative, such as playing with dolls and teddies, or acting out scenes from favourite DVDs. Observation over time often reveals a repetitive scenario that does not change and cannot be interrupted. Children with ASD rarely involve other children in their play unless

they are given a particular role in a controlled situation⁴.



Rituals and routines are also common. There is often resistance to change in routine or the environment. For example, the child may become upset if a new route is taken going to kindergarten, the furniture in the house is rearranged, or the child is asked to wear new clothes. You might observe hand and finger twiddling and repetitive body movements such as hand flapping or tip toe walking. There may also be a fascination with movement of objects such as spinning a plate or wheel. The child might look closely at objects such as the edge of a table, or pattern of spokes on a wheel. Many children with ASD have unusual interests that preoccupy their daily activities. These may involve a fascination with trains, figurines or particular DVDs.

Under or over-reactivity to sensory input or unusual interest in sensory aspects of the environment are now included in the DSM-5. The child might be indifferent to pain/heat/cold, show adverse response to specific sounds or textures, excessively smell or touch of objects, or be fascinated with flickering lights or shadows. Sensory problems may cause distress, fear and worries which disrupt daily life and social functioning. Interest in sensory activities can be a source of pleasure for some children⁶. Research suggests that sensory problems are present in most children with ASD⁷.

1. Kanner, L. (1943) Kanner, Leo. "Autistic disturbances of affective contact." *Nervous child* 2.3: 217-250.
2. American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: American Psychiatric Publishing.
3. Lord, C., Risi, S., Lanbrecht, L., Cook, E., Leventhal, B., DiLavore, C., Pickles, A., and Rutter, M. (2000). The Autism Diagnostic Observation Schedule - Generic: A Standard Measure of Social and Communication Deficits Associated with the Spectrum of Autism. *Journal of Autism and Developmental Disorders*, 30(3), 205-223.
4. Howlin, P. (2005). Outcomes in Autism Spectrum Disorders. In Volkmar, F. R., Paul, R., Klin, A. and Cohen, D. (Ed.), *Handbook of Autism and Pervasive Developmental Disorders*. New Jersey: John Wiley and Sons.
5. Grandin, T. (1995). *Thinking in Pictures*. USA: Random House.
6. O'Neill, M., and Jones, R. S. (1997). Sensory-Perceptual Abnormalities in Autism: A Case For More Research? *Journal of Autism and Developmental Disorders*, 27(3), 283-293.
7. Baranek, G. T. (2002). Efficacy of Sensory and Motor Interventions for Children with Autism. *Journal of Autism and Developmental Disorders*, 32(5), 397-422.

References

