



SCOTTISH AUTISM SERVICE NETWORK

Autism Spectrum Disorders (ASD) Information

Autism is a condition which is now thought to be included in a spectrum of conditions called the *autism spectrum*. Asperger's syndrome, Atypical autism, Kanners Autism, Classic autism and pervasive developmental disorder are all conditions or terms that can be referred to as being upon the autism spectrum.

ASD is a lifelong developmental condition that affects the way a person communicates and relates to the world around them. It can mean that they have differences in the following:

- understanding the verbal and non verbal communication of others'
- expressing themselves appropriately
- understanding the unwritten social rules of everyday life
- organising and managing their time effectively
- taking in information (especially information in certain forms)
- coping with new or unfamiliar situations
- understanding the feelings and thoughts of others'
- dealing with day to day life in the way that people without ASD do

Asperger's syndrome:

Asperger's Syndrome is a specific form of ASD that affects the way people communicate and relate to people and the world around them. However, they are also usually more academically able than those with classic autism (they do not usually have an additional learning disability) and their language ability can be deceptively good. The main specific features of Asperger's Syndrome (adapted from Burgoine & Wing, 1983) are as follows:

- Difficulty with empathy
- Sometimes naïve, inappropriate, or one-sided interaction
- Difficulty forming friendships
- Sometimes pedantic (abides strictly to rules of grammar) and/or repetitive speech
- Difficulty understanding and expressing non-verbal communication
- Intense absorption in certain subjects
- Sometimes clumsy and/or ill-co-ordinated movements and 'odd' postures

Incidence of ASD:

- 91 individuals with ASD per 10,000 of population (approx 1 in 110)
- 36 per 10,000 with Asperger syndrome (approximately 1 in 278 people)
- 4:1 male to female ratio of autism (approx 9:1 in Asperger's syndrome)
- Autism is 17 times more common than Down's syndrome!
(Source: the National Autistic Society)

Possible causes:

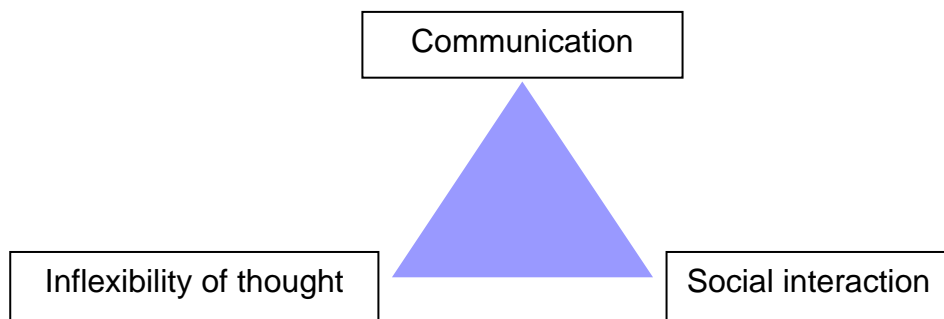
The exact causes of ASD are not fully established, but there is a variety of evidence that ASD is caused by a variety of conditions affecting brain development, which occur before, during, or after birth.

There are some factors which there is a level of evidence for and more research is being carried out regarding these. It is believed that neurological differences (differences in the certain parts of the brain) account for the effects of ASD. Also various specific genes and chromosomes are thought to potentially be implicated in ASD.

There is currently no known proven cure for ASD, but there are many approaches and interventions that can help an individual with ASD to progress and have a good quality of life. It is important to remember, though, that focussing on the cause will not change the individual with ASD and looking at ways to assist them and move their lives forward is paramount.

The Triad of Impairments:

Individuals with ASD are classified and described as having a 'Triad of Impairment'. This means that there are three areas that all individuals with ASD have specific difficulty with.



Specifics of how impairment of communication may affect individuals with ASD:

- Puzzled by rules of conversation
- Repetitive speech
- Talks incessantly regardless of response by others
- Difficulty understanding abstract/ambiguous language
- Difficulty understanding sarcasm/some types of humour
- Literal interpretation of language
- Inappropriate expression/body language
- Restricted use and understanding of gestures/body language
- Inappropriate/poor quality of eye contact

Specifics of how impairment of social interaction may affect individuals with ASD:

- Difficulty understanding the unwritten rules of society
- Lack of intuitive knowledge of social behaviour
- Difficulty being aware of others' feelings
- Difficulty acknowledging/understanding others' emotions
- Difficulty understanding of others' thoughts/beliefs etc
- Impairment in 2 way social interaction
- Difficulty establishing relationships
- May withdraw from social interaction
- Inappropriate use of gestures/expressions (yawning, grimacing, laughing) etc

Specifics of how impairment of flexibility of thought may affect individuals with ASD:

- Dependence on routine
- Prefer/enjoy structure and predictability
- Rigid habits/routines
- Resistance to change
- Difficulty with transition
- Preoccupied with a limited range of interests
- Very specific interest/knowledge in 1 or 2 subjects
- Difficulties with generalisation
- Difficulties with problem solving
- Difficulty with abstract and conceptual thought

Psychological theories regarding autism:

Theory of Mind (Simon Baron Cohen, 1992)

Difficulty with associating thoughts and beliefs to others

Executive Function (Ozonoff et al, 1991)

Difficulty sequencing, organising and planning ahead

Central Coherence (Uta Frith, 1989)

Difficulty linking separate parts to make a coherent whole

Strengths of individuals with ASD:

- Often excellent visual skills
- Good visual memory and factual memory (rote)
- Good focus in repetition
- Precision
- Accuracy
- Honesty
- May be highly knowledgeable in areas of particular interest

Communication methods:

- Indicate if the individuals' communication is inappropriate or not
- Teach them how to seek help / ask for clarification
- Say what you really mean (for example, don't say "your tea's ready" when you mean "come downstairs to sit at the table and eat your tea")
- Give them time to process the information before expecting an answer
- Always give very clear, precise instructions
- Check their understanding of information/tasks before expecting them to do things
- Give them ways/phrases to indicate when they need help
- Put instructions in writing if possible/appropriate
- Use visual aids – people with ASD often respond better to visual information
- Give written guidelines and 'rules' for difficult/social situations

Possible reasons for non typical/adverse behaviours in individuals with ASD:

- Sensory overload or under stimulation
- Difficulties processing information (mainly more than one eg, visual *and* verbal)
- Environmental factors (noise, artificial lighting, 'busy' rooms etc)
- Change
- New situations
- Difficulty generalising (doing something that they know in a different environment)
- Removal from situation
- Attention (especially when they are unable to communicate something)
- Wanting something
- Boredom
- Need to Communicate
- Lack of structure after school finishes

" High sounds, women's voices hurt more... everything was always too loud all at the same time... I hear sounds that you cannot hear such as doodling with a pencil, shuffling pens, rain sounds like guns going off, sounds in the same room are jumbled together."
(Donna Williams – person with autism)

Tips for managing behaviour:

- Remember that all behaviour has a purpose
- Behaviour is due to a 'Stimulus – Response'
(something occurs to make something else happen)
- Don't try to remove a behaviour without replacing it with something else that serves the same purpose or without removing stimulus
- Provide alternatives / let the individual know what to do instead
- Do a diary of behaviour by recording what behaviour occurred: what happened before (A), what the behaviour was (B) and what happened after (C) - this can help you to see causes and reasons for behaviour
(Antecedent Behaviour Consequence analysis)

“ Reality to an autistic person is a confusing mass of events, people, places, sounds and sights. There seem to be no clear boundaries, order or meaning to anything. A large part of my life is spent just trying to work out the pattern behind everything. Set routines, times, particular routes and rituals all help to get order into an unbearably chaotic life. ”
(Therese Jolliffe, 1992 – person with an ASD)

Ways to help with behaviours, anxiety of the individual and making an individual with ASDs’ day to day life easier:

- Remove/avoid adverse sensory stimuli
(eg, noisy machinery, strong tasting foods, highly textured/coloured fixtures etc)
- Limit information given at one time to avoid information processing overload
- Tailor environments and avoid over stimulatory ones (excess people, noise, etc)
- Plan for change and give prior warning of things that are going to happen
- Teach the individual what to do in new situations in advance
- Give guidelines for generalisation (how to do a skill in a different environment)
- Plan the persons time and give timetables, lists, and/or pictures of these plans
- Give the individual positive tasks to do - things they are known to be good at (things can often be very negative for them and this can help redress the balance)
- Provide symbols and/or set phrases for the individual to ask / indicate things
(eg, for when angry/upset/confused, when they want to be left alone, when they need to leave a situation, for giving their views etc...)
- Help the individual to learn to develop their own strategies
- Work on their strengths (attention to detail, accuracy, memory, honesty etc)

Positive ways forward...

- Reinforce positive behaviour and interactions
- Use motivators (time with their favourite toy, reading their favourite magazine etc) to encourage them to carry out appropriate tasks
- Encourage them that how they are is *special* (not “different” or “wrong”)
- Use their ‘special interests’ to encourage them and teach them things
- Make use of befriending schemes
- Organise meeting others’ with ASD

Remember...

Many individuals with ASD can lead fulfilling lives and develop positively with the help and support of others.