



ITA

International Teachers Association

MODULE 17: Understanding the spectrum

Introduction

This module introduces you to the definition of Autism and will help you to understand the vast spectrum of abilities and difficulties that it covers. One of the main aims of this module is to highlight that no two people with Autism are the same and that Autism very rarely occurs in isolation from other Learning Disabilities.

The effect that Autism can have on a person, their family and friends is far reaching but with understanding and support there is no reason why a person with Autism cannot reach their full potential.

Our expert authors hail from countries all around the world, which means that they might be writing in American English, British English, Australian English, or other variations of our shared language. Please keep in mind that there might be spelling variations in our courses.

17.1. What is Autism

17.2. Myths

17.3. Analyzing the Spectrum

17.4. Learning Disabilities

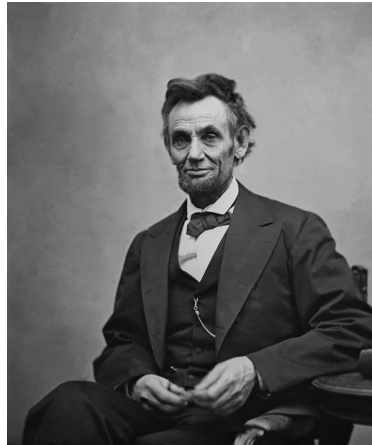
17.5. Social and Emotional Development

17.1 What is Autism? (1 of 3)

It is interesting that up until 70 years ago, Autism did not exist as a clinical condition; 40 years ago clinicians were still in the process of defining Autism. This does not mean that it did not exist before 1944; it just means that people who we now consider to be Autistic were considered insane and needed to be kept away from the rest of society.



ITA International Teachers Association



There are several famous people throughout history who may be considered as being Autistic:

- Abraham Lincoln, US President
- Albert Einstein, German/American theoretical physicist
- Carl Jung, Swiss psychoanalyst
- Henry Ford, US industrialist
- Wolfgang Amadeus Mozart, Austrian composer
- Michelangelo, Italian Renaissance artist
- Virginia Woolf, English Writer
- Jane Austen, English novelist, author of *Pride and Prejudice*

"The thing about being autistic is that you gradually get less and less autistic, because you keep learning, you keep learning how to behave. It's like being in a play; I'm always in a play." - Temple Grandin

17.1 What is Autism? (2 of 3)

Autism is a developmental disorder that causes problems within three areas of cognitive ability. In scientific terms Autism alters the way in which the brain processes information by altering the way that the nerves and the synapses connect and organize information.

This results in difficulties in the following three areas.

- Delayed social skills (an inability to read social situations and act appropriately)
- Communication Skills (both verbal and non-verbal)
- Ritualistic Behaviors (behaviors that restrict ability and experiences within everyday life as well as repetitive behaviors)



ITA
International Teachers Association



In order to get a diagnosis of Autism, a person needs to have difficulty in all of the three areas. Bear in mind that not everyone will be diagnosed in childhood, many people are not diagnosed until they reach their late teens or even adulthood, as some symptoms may be disguised.

Often a child will reach milestones at a normal pace, and for some reason appear to lapse or having difficulty in moving to the next childhood milestone. Change can appear gradually. Some of the signs are usually picked up by the parents within the first two years. Although there is usually an hereditary factor, scientists are also considering environmental factors.

It is estimated that the number of people who are affected by Autism are around 1-2 per 1,000 people worldwide. Boys are 5 times more likely to be affected than girls. In the USA, it is estimated that 1 in 68 children are diagnosed with ASD, which is a 30% increase on the 1 in 88 back in 2012. The numbers are very similar in the UK. What is more concerning is that the numbers have sharply risen since the 1980's.

17.1 What is Autism? (3 of 3)

Leo Kanner (1894-1981)

Kanner was an Austrian American Psychiatrist, who is world renown for his work in child psychiatry in particular in Autism. He originally immigrated to the United States in 1924, where he took up the post of Assistant Physician at Yankton Hospital in Yankton, South Dakota.



ITA

International Teachers Association

In 1930, he was selected to work at the prestigious John Hopkins Hospital in Baltimore to develop the first child psychiatric service at the hospital. Three years later he was awarded the title of Associated Professor of Psychiatry. Two years after this he wrote his first textbook 'Child Psychiatry'.

By 1943 his paper on 'Autistic Disturbances of Affective Contact' was viewed alongside the work of Hans Asperger, formed the basis for the study of the Autistic Spectrum. To being with it was thought that parents who were emotionally cold towards their children were one of the causes of Autism. This hypothesis was held as a truism until it was refuted in 1970.

Although Kanner eventually became the Director of Child Psychiatry, he did not retire from John Hopkins until 1959, however he continued to edit for the Journal of Autistic Developmental Disorders until 1974.

17.1.1 What are the signs of Autism? (1 of 4)

First of all there is no one size fits all! There is no visual physical characteristic that sets Autism apart from any condition. To diagnose Autism the focus needs to be on behaviours and social interaction. Here are a few signs.

Heightened sensitivity to sound, smell, light, taste and touch.

- This may mean that the child will put their hands to their ears to block out some sounds. They may also find it difficult to cope in the classroom as they will not be able to concentrate on their work.
- They may be hyper sensitive to smells, which will cause them to avoid the smells or try to cope with the sensory overload.
- They may find that they feel more comfortable if they are in a dimly lit room rather than a brightly lit room.





ITA

International Teachers Association

- They will have specific tastes and texture preferences for the food that they eat. It is very usual for an autistic child to only eat white food (white chocolate, banana and white cheese). Sometimes despite the input from parents encouraging the child to eat healthy food, they will live off chips, gravy and pasta and still appear to be healthy.
- They will also avoid eye contact.
- They will not wear some clothes because they feel that the fabric is scratchy or the colour is wrong. Most parents cope with this by finding the fabrics and style that the child finds comfortable and buy several sets.

17.1.1 What are the signs of Autism? (2 of 4)

There are 3 other senses that tend to be less well known.

1. Vestibular: this is the feeling of balance, movement and knowing where you are in the space that you occupy.
2. Proprioceptive: this is the awareness of your posture.
3. Interceptive: this is the sense of the internal body and regulation.

In order to understand the difficulties associated with Sensory Processing Disorders it is important to know that a person with Autism can be:

- Hypo (they are less sensitive)
- Hyper (they are over sensitive).

An example of Hypo-sensitivity is when a child spins for ages and they walk away with no apparent ill effects such as appearing dizzy. This could be regarded as thrill seeking behaviour.

An example of Hyper-sensitivity is when a child will only drink out of a cup made of a particular material, or a particular colour and sometimes the cup may have to be a particular temperature otherwise they will not even attempt to drink out of it.

But it is not just the senses that are affected. The Autistic child (and Autistic adult), will find it hard to read social situations and people's faces. They do not know how to act on the subtle social cues. They get upset if their routine changes in any way and find it hard to draw on past experiences when dealing with a new social situation.

17.1.1 What are the signs of Autism? (3 of 4)



ITA

International Teachers Association

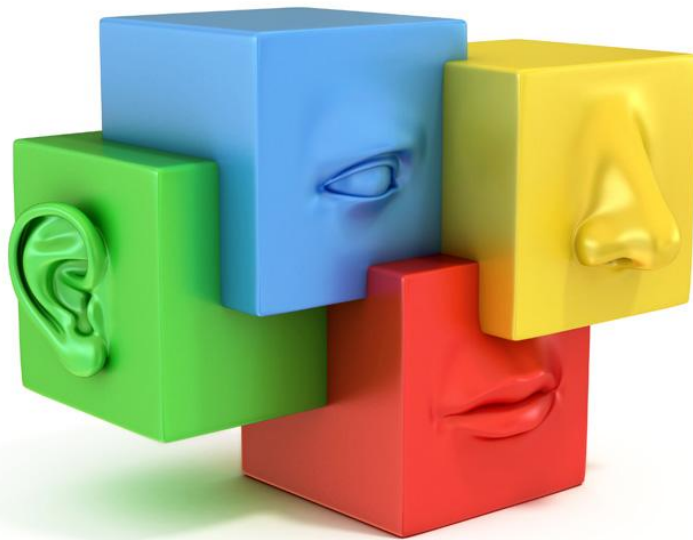
The young child usually enjoys solitary play, and will make up intricate story lines that will get repeated over and over again. They will sort and re-sort toy cars or buttons, placing each item precisely. They will count a set of items at every opportunity.

The child may lack sense of humour, but this is mainly because they take what is said as literal, there are no shades of grey. Because of this it is important that the adults who work with the child are very careful how they speak to the child.

'Walk on ahead' could be interpreted as 'Walk on your head'; a common phrase that could really upset an autistic child is 'Have you got a frog in your throat?' Be prepared for a major melt down!

Generally there is a delay in speech especially for boys. Girls however, generally speaking do not have this problem.

There are also other gender differences which will be covered in module 5. Another indication of autism is that around 20% of children with autism will assume an abnormal gait and possibly 'toe' walk.



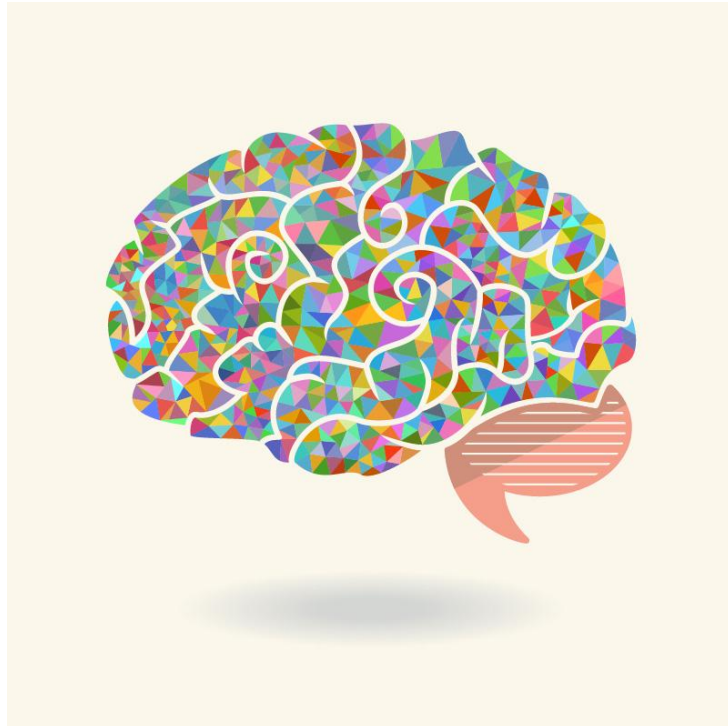
17.1.1 What are the signs of Autism? (4 of 4)



ITA

International Teachers Association

Generally children and adults who have high functioning tend to be regarded as aloof and remote in relationships. Most feel that other people should know what they are thinking and act accordingly (Theory of Mind).



Other characteristics of Autism can include:

- Difficulty in appreciating other people's thoughts and feelings.
- Little or no ability to think abstractly.
- Difficulty in interpreting thoughts that come into their head.
- Lack 'common sense'.

If after reading this you feel that you have some of these attributes, be assured that most of us do, as we are all a bit of everything it is only a problem when it affects our daily lives.

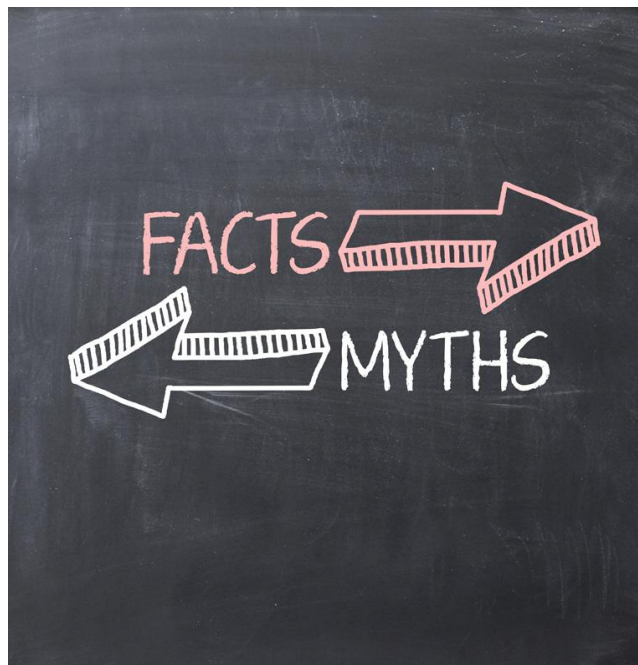


ITA

International Teachers Association

17.2 Myths

There are several myths that surround Autism. Many of these myths have been generated over the years and this is mainly due to the image of an Autistic Child that sits on their own, has little interest in communication with others and will burst into a tantrum for no apparent reason.



Over time research has proven that this is not the case and that most people (children and adults) who are autistic find that their behaviour is a direct result of anxiety in situations that they don't understand, feel threatened or have difficulty communicating their needs.

We will be exploring four of the myths in this section of the module:

- Autistic People don't want friends
- All people with Autism are good at Maths
- People with Autism have no feelings
- Tantrums can happen for no apparent reason.

17.2.1 Myth 1: Autistic People don't want Friends

Autistic people do want and need friends but social challenges make it very difficult. With support they can make friends and enjoy the company of other people. Generally people with



ITA

International Teachers Association

Autism tend to find it difficult to make friends within their own age group. People on the higher end of the Autistic Spectrum generally find it easier to befriend and identify with people who are either younger or older than them.



This preference will depend on personality, interests and the amount of exposure they have to different people. In school children with autistic tendencies tend to stay on the periphery of other groups of children. Generally they are playing alongside but not with others, but they are desperate to join in with their class mates.

At any age (child or adult), they find it hard to crack the social code to join in with others. They find it hard to instigate relationships and will see a refusal as a personal affront. It is hard for them to see another person's point of view or understand that the other person may have other pressures at that point in time. But they do want and need friends.

17.2.2 Myth 2: All people with Autism are good at Math

Many people with Autism are gifted in Maths but they may also be gifted in other areas such as music or art. Many people are interested in a topic and will strive to find out all they can about the topic. They are especially good at making collections of objects and identifying each object by details that would be lost on the majority of people. But, back to the maths, it is a very rare thinker that can calculate huge numbers.

It is also a myth that people with Autism are not creative. If you consider the phrase 'thinking outside the box', some people can never think outside of the box, people with Dyslexia are good at thinking outside of the box, but people with high functioning autism are good at 'finding another



ITA

International Teachers Association

box'! They can usually put a different slant on a problem and arrive at an answer as they are not bound by the confines of thought in the same way as other people.

17.2.3 Myth 3: People with Autism Have no Feelings

Autistic people have emotions and feelings. The problem is that they have difficulty in expressing the emotions and communicating their feelings. This is further complicated as they will often have difficulty understanding their feelings or recognising their emotions. It's like continually being a teenager but without having the combination of the lock that could release the information.

People with Autism have emotions, they have empathy but they just show it in a different way. They may be able to express their feelings better by using the written word rather than by verbal face to face communication. They may even find that drawing a picture will express their feelings more accurately.

Whichever way they choose it is their personal preference and their way of dealing with the situation, but they need help with the skills they need to do this.

17.2.4 Myth 4: Tantrums Can Happen for no Apparent Reason

Children and Adolescents with Autism are capable of tantrums just a like any other child of their age. But there is a big difference between a tantrum and a sensory overload (The subject of Sensory Overload will be dealt with in detail in Module 2 and Module 10).

But on the subject of tantrums there is usually a reason for a tantrum and it usually revolves around the child wanting something that they cannot or should not have. Outbursts can also be caused by a response to extreme anxiety.

There is always a reason for anger especially if it bound up with frustration and in such a situation with an Autistic child it may be due to sensory overload.

17.2.5 Positive Side of Autism (This is not a Myth)

The following characteristics are quite general and will depend on personality and ability.

- The ability to spot errors



ITA

International Teachers Association

- Directness in dealing with people
- Honesty (if you ask their opinion, you know it will be an honest one).
- Very good at giving interesting viewpoints.
- Usually have areas of expertise.
- They will get on with tasks as they are less likely to chatter.
- Very conscientious.
- Punctual.
- Known for reliability on routine tasks.

17.3 Analyzing the Spectrum (1 of 2)

Autistic Spectrum Disorders are divided into three main areas:

- Autistic Disorder
- Asperger's Syndrome (which is often referred to as high functioning autism).
- Pervasive Development Disorders (PDD). Also included in the PDD was Rhett's and Childhood Disintegrative Disorder.

In order for a person to be diagnosed with Autism they have to meet all three of the criteria for the condition.

- Delayed social skills (an inability to read social situations and act appropriately)
- Communication Skills (both verbal and non-verbal)
- Ritualistic Behaviors (behaviors that restrict ability and experiences within everyday life as well as repetitive behaviors)

The criterion is found in the DSM-V (Diagnostic Statistical Manual). The DSM is mainly used in the USA and UK. Over the years there have been changes to the manual.

17.3 Analyzing the Spectrum (2 of 2)

Other areas of difficulty

- Difficulty with social relationships.
- Difficulty with communication.
- Limitations with imagination.
- Special interests.
- Love of routines.
- Cognitive inflexibility.



ITA

International Teachers Association

- Attention spans.
- Sensory sensitivity.
- Odd postures and poorly coordinated movements.

Another consideration is that not all people with Autism are diagnosed early in life, some can be in their late teens or mid-life before it is diagnosed. Usually when people are diagnosed they experience some sort of relief as it helps them understand why they are different to others around them. Also it is quite common to have a genetic factor within a family, Autism rarely appears in isolation.

It is also important to realise that Autism rarely occurs independently of other difficulties.

17.4 Learning Disabilities

Learning disabilities are most apparent in school, but that does not mean that learning does not take place in such as at home or on outings.

A difficulty in school does not always mean that there is a learning disability. Anxiety, depression, stressful events that cause the child to over think situations and react to a fight or flight stimulus or emotional trauma can cause difficulties with concentration which will make the learning environment more challenging.

Additionally ADHD and Autism can occur in unison which will be confused with learning disabilities. ADHD is not regarded as a learning disability although it can affect learning. Children with Autism will have difficulties communicating, reading body language learning basic skills and making friends.

Most people, who have Autism, also have learning difficulties, such as Dyslexia, Dyspraxia, ADHD, and Tourette's syndrome. For some people there may be more than one learning difficulty to cope with. If this is the case then it is usual to focus on the disability that causes the most difficulty or most concern.

In other cases the disability may not be apparent at first as they may have found ways to disguise their difficulty. This can be most apparent in people who have dyslexia.

It is important to support the child rather than the label. In most classrooms there is a set of support guidelines that can be adapted to help all children who are struggling, not just children with Autism and/or learning disabilities.



ITA

International Teachers Association

17.4.1 The Most Common Learning Disabilities

The following chart shows the most common learning disabilities and the corresponding areas of difficulty experienced

Disability	Difficulty	Other areas of difficulty
Dyslexia	Problems with reading, writing, spelling and speaking	Following instructions Organisational skills
Dyscalculia	Problems with calculations, mathematical concepts, telling the time and using money	Abstract mathematical concepts and applying concrete concepts to abstract applications such as tessellation.
Dysgraphia	Difficulty with writing	Problems with forming letters in handwriting, spelling and organising ideas
Dyspraxia (Sensory Integration Disorder)	Difficulty with fine motor skills	Problems with hand-eye coordination, general balance and manual dexterity
Dysphasia	Difficulty with Language	Problems with understanding spoken language. Poor reading comprehension
Auditory Processing Disorder	Difficulty in processing the difference between sounds	Problems with reading, language and comprehension
Visual Processing Disorder	Difficulty in processing visual information	Problems with reading, math, maps, charts, symbols, pictures
Scotopic Sensitivity Syndrome	Scotopic Sensitivity Syndrome is a distinct type of visual dyslexia.	Difficulties coping with light source sensitivity, and colour. Research has shown that 50% of those with reading difficulties suffer from Scotopic Sensitivity Syndrome.

17.5 Social and Emotional Development



ITA

International Teachers Association

Because a child has a learning disability does not mean that their social and emotional needs are any less the children who surround them at school. If you consider how difficult it is for the child with Dyslexia to decode some of the words in the written instructions they are given in class. The child can see how the other children are helping each other,

If the child is above average intelligence, having a learning disability can be doubly difficult. Most people with Dyslexia are average or above average intelligence and the same is the case with Asperger's syndrome. This is further confounded if the child suffers with anxiety. This will result in poor self-esteem and low confidence levels.

Learning difficulties can lead to low self-esteem, isolation and ultimately behavior problems. If a child has a good support system that allows them to learn to express themselves, deal with their frustrations and see disappointments as challenges rather than an accepted ending they will have the chance to taste success.

Generally children with learning disabilities have difficulties with expressing their feelings, which will cause frustration and in some cases anger. They also have difficulty taking on strategies to enable themselves to calm down. Good social and emotional skills are a good indicator of success for both children and adults. If a child or adult can develop socially and emotionally, it can compensate for a lack of academic skills

Early interventions can help children with Autism become more independent, confident and self-reliant in many social situations. This does not mean that the interventions can 'cure'; it means that the child will have a template in which they can expand their knowledge and apply their learning to many different situations, very similar to the comment by Temple Grandin in section 1.1.

[EXAM LINK](#)