# A CHILD ON THE AUTISM SPECTRUM AT SCHOOL-AGE

This guide explains characteristics relating to the autism spectrum, how these are seen in the behaviour of a child on the autism spectrum, and how to take these characteristics into consideration at school, during afternoon activities, and during recreational activities with an autistic child.





# **ABOUT THE AUTISM SPECTRUM**

Autism spectrum disorder is a neurodevelopmental disorder that affects how a child communicates and interacts with other people, and how the child senses and experiences the world around them. It is a lifelong condition that is caused by different development in the central nervous system.

Autism spectrum disorder manifests in a highly individual way, and the disabilities it causes also vary greatly from person to person. It can be said that once you've met one person on the autism spectrum, you've only met one person on the autism spectrum.

Around 1-1,2 % of the global population is on the autism spectrum. Autism spectrum disorder is more common in boys than girls. In earlier decades in particular, the gender ratio for autism diagnoses reached 15:1. This mostly applied to Asperger syndrome, because the diagnostic criteria were developed to describe the characteristics of autism in boys. Girls and women exhibit the syndrome in a slightly different way from boys and men. Because of this, many girls on the autistic spectrum were left undiagnosed. The situation concerning the diagnosis of girls and women has nevertheless begun to improve, and nowadays girls on the autism spectrum are better recognised. The current ratio of boys to girls on the autistic spectrum is closer to 3:1.

A change to how autism spectrum disorders are diagnosed is under way. The ICD-11 classification will be taken into use and will replace the ICD-10 classification. The change means that separate diagnoses (autism, Asperger syndrome, atypical autism, childhood disintegrative disorder) listed under pervasive developmental

disorders in the current international classification of diseases will be removed and replaced with a single umbrella diagnosis of "autism spectrum disorder". This will mean that people on the autism spectrum will receive a common diagnosis of autism spectrum disorder, which is then further specified using additional attributes to describe functional ability.

# WHAT CAUSES AUTISM SPECTRUM DISORDER?

There are genetic and physiological factors behind autism spectrum disorders. Autism spectrum disorder is a multifactorial inheritance condition, but events which take place during foetal development also have an effect. Autism spectrum disorder is not caused by dysfunctional parenthood, bad upbringing or other such factors. Autism spectrum disorder is a permanent condition.

There are some visible and recognisable characteristics in the behaviour of all autism spectrum people. The following will be examined below with regard to children on the autism spectrum:

#### Social interaction

A child on the autism spectrum finds it difficult to understand others' emotions and to express his or her own feelings. This means he or she can find it hard to create and maintain friendships. He or she may also have difficulty maintaining eye contact. He or she may react differently with expressions and gestures.

#### Social communication

A child on the autism spectrum experiences various levels of difficulty understanding and producing spoken language and non-verbal expression. For example, she or he may have difficulty deducing how another person feels based on tone of voice, and may interpret language very literally.

### Social imagination

A child on the autism spectrum has difficulty in perceiving different situations outside his or her own range of experience. He or she may find it difficult to see things from another person's perspective and empathise with others.

She or he may also have special characteristics relating to sensory integration, problems with executive function and various repetitive behaviours and specific interests.

#### SENSORY SENSITIVITY

The sensory information received and interpreted by a child on the autism spectrum is individual and atypical. The child may be over- or under-sensitive to different stimuli, such as sound, touch, various smells and tastes, light, colours, temperatures, and pain. For example, background noise which would rarely bother others may sound rather loud and disturbing to a person on the autism spectrum. This can cause anxiety and even be perceived as physical pain. Visual and auditory sensitivity are the easiest to notice. Over- and under-sensitivity can occur in the same sensory area and can vary greatly over the course of an individual's life, sometimes even daily.

A child on the autism spectrum can easily become sensorily overwhelmed. This is known as sensory overload and it can be caused by noises, lights, smells, and crowds. In situations when the child experiences sensory overload, he or she may aim to reduce the impact by closing off some of his or her senses, withdrawing to a quiet place, or calming himself or herself down in an individual way such as by jumping, flapping their hands, flicking things or rocking (these are known as "stimming"). All of these are ways in which a child on the autism spectrum aims to regulate sensory load, and he or she should not be prevented from doing so unless absolutely necessary.

# Special characteristics relating to sensory processing (examples):

TO SENSORY PROCESSING	OVER-SENSITIVITY	UNDER-SENSITIVITY
SIGHT	Avoids bright, flashing lights; Too many colours and clutter can induce anxiety; Objects which move towards the child or other objects may cause fear	Seeks out strong visual sensory stimulation
SOUND	Finds certain frequencies unpleasant: drill, noises made by machines and lights, peo- ple's voices (hissing, buzzing, rustling); Sudden and loud noises (dogs barking, children crying, clapping); Sound from multiple sources	May only hear in one ear; May be partially or wholly deaf in the other. May not acknowledge certain sounds; Enjoys noisy places and crowds; Likes slamming doors or the noise caused by doors breaking
TASTE	Avoids strong flavours, spicy favours, unfamiliar favours. Note: The structure, colour and smell of food are also important	Seeks out strong sensory stimuli (chili, spicy foods)
SMELL	Avoids strong smells and fragrances in the environment (people, food, animals, nature)	Prefers strong smells (including unpleasant smells)
TOUCH (light touch and deep touch)	Touching, clothing seams, materials, zips, labels, socks, hair care, showers – all feel unpleasant. Sensitivity to pain	Seeks out sensory stimuli relating to deep touch in particular; Difficulty identifying e.g. pain
BALANCE AND BODY AWARE- NESS	Motor clumsiness; Avoids high places, uneven terrain; Fear of escalators and lifts	Seeks out movement, e.g. rocks constantly, sways

#### Communication

A child on the autism spectrum may have varying levels of difficulty with understanding and using language and with interpreting expressions and gestures. He or she may understand spoken or written language very literally. He or she may use unusual gestures or expressions and have difficulty processing and remembering what was discussed. Some children on the autism spectrum have very limited speech or may not speak at all. They require augmentative and alternative communication methods to aid them with communication. It is important to find a way for the child to communicate so that he or she can express himself or herself and be understood in his or her environment.

#### Executive function

A child on the autism spectrum may have difficulties with executive function. He or she may for example have difficulty perceiving how much time a task will take, and in which order things should be done to achieve the best result. It may be important to him or her to do things in a certain way and in a familiar order. Even a small change in routine can prevent or complicate progress. From the outside, the behaviour may seem selfish, self-initiated or indifferent, but actually it may be a sign of challenges relating to executive function. The child may also find it difficult to remember orders or suggestions that he or she has been given, particularly if too many are given or too quickly.

Executive function difficulties apply to many areas of daily life: dressing, hygiene, performing various tasks, etc. Usually executive function can be improved by planning ahead and structuring activities. A child on the autism spectrum perceives things differently and benefits from knowing what is going to happen - when it is going to happen - with

whom it will happen - how long it will last and what will happen afterwards. To support executive function, both illustrated and written instructions can be created to support task progress, environmental perception and dealing with change.

# Sensitivity to stress

The ways in which people become stressed and react to stress are highly personal. Some people seem to remain calm even in difficult situations, while others stress over even the smallest things. Different life events and external stimuli can raise stress levels to varying degrees depending on the situation. If a person's stress level is already raised for one reason or another, the impact of another stress factor can be more significant than usual. Factors which raise stress levels can differ greatly from short, situational things or events, such as sensory stimuli, or longer-term things such as changes in our living environment. It is possible to prepare for many factors which raise stress levels through forward planning.

An autistic child's nervous system can easily become overloaded and his or her stress levels can rise as a result. This overload may be caused by e.g. a noisy environment, change and unclear situations, and social interaction. For people on the autism spectrum, there is usually a much finer line between a normal stress level and chaos than in people who do not have a neuropsychiatric diagnosis. Note that positive events and situations in life also raise stress levels, such as a long-awaited trip to a child's favourite place, or a birthday. Challenging behaviour is always related to elevated stress levels, so reducing stress also reduces challenging behaviour.



# SUPPORTING INTERACTION

A child on the autism spectrum often finds it challenging to interact with others and requires help with these special challenges. Reciprocity for example, can prove challenging in interaction. A child on the autism spectrum will not necessarily start a conversation or feel the need for discussion, greetings, or to share his or her experiences. Some are also clearly less interested in personal relationships. However, this doesn't mean that a child on the autism spectrum does not want to interact. Interaction is complicated by facial blindness, which is rather common and makes it difficult to recognise people, and by difficulty interpreting other people's expressions, gestures and feelings.

# **ABOUT THE AUTISM SPECTRUM**

# A school-age child on the autism spectrum may have

- difficulties learning social skills
- few friends
- difficulties making eye contact
- an uneven skills profile she or he may be very good at some things, but don't seem to manage with others
- specific areas of interest, which may be rather unusual
- a tendency to interpret what is said literally
- problems with attention
- challenging behaviour
- routines that he or she becomes stuck in
- clumsiness
- differences in sensory processing.

# The child may find it difficult to

- interpret body language and other non-verbal communication
- empathise with other children
- perceive things as a whole
- stay on task
- think flexibly
- take care of his or her belongings
- refrain from interrupting others
- tolerate change, failure, or criticism
- be with others during break time.



# A child on the autism spectrum also has resources and strengths:

- a good memory
- the ability to immerse himself or herself in his or her own interests
- characterful expression and view of the environment
- honesty
- fairness
- following rules
- differences in sensory processing, sensitivity
- the ability to visualise
- logic
- creativity
- special areas of talent
- conscientiousness
- plenty of ideas
- the ability to immerse himself or herself in things
- an interest in facts
- attention to detail
- a characterful sense of humour

- the ability to perceive computer logic
- the ability to work thoroughly with attention to detail

## Challenging behaviour

A child on the autism spectrum may sometimes exhibit challenging behaviour. Behaviour is called challenging when it produces clear physical, emotional, financial or social harm to the person himself or herself or to the environment. There is always a reason for challenging behaviour. Challenging behaviour often relates to special sensory processing characteristics, executive function challenges, difficulties with interaction and communication, and overload caused by social situations. Various changes in the environment, such as new people, or sudden changes midway through the school day may greatly affect someone on the autism spectrum. This will cause the child's stress levels to rise. If the situation goes unnoticed, there is a risk of reaching the so-called chaos threshold, and challenging behaviour ensues.

The most effective thing to do to reduce challenging behaviour is to prevent stressful situations in advance. It is equally important to consider the causes of the situation in which challenging behaviour occurred and the events which led to the situation, so that the child can learn a different way to behave. The best way to prevent challenging behaviour is to consider the autistic child's needs regarding sensory processing, executive function, communication and interaction, and to adapt the environment and activities to make them more autism-friendly.

#### REMEMBER

A child on the autism spectrum sees the world in a different way, so she or he also learns things in a different way. As such, we need

a different way to teach and guide. Learning often takes place visually. It is worth noting an individual's learning style and to use the most multichannel teaching and guidance methods possible.

The talents of a child on the autism spectrum may be unevenly distributed. He or she may be very skilled at some things but find other things difficult. This skill is often due to the child being extremely interested in the topic. Remember that a child on the autism spectrum may require more repetition and practice than usual to learn things. Forcing him or her will not help; instead, the right kind of rewarding can promote learning.

#### **HOW TO SUPPORT A CHILD ON THE AUTISM SPECTRUM**

#### Plan ahead

- Help the child to plan their use of time, e.g. for completing tasks.
- Make agreements with him or her.
- Anticipate cause and effect in situations.
- Anticipate social situations, especially if they are unfamiliar.
- Motivate the child with rewards, such as stickers.
- Give instructions one at a time. If necessary, use pictures or written instructions to help.
- Choose a regular spot for the child in the classroom, school cafeteria, etc.
- · Anticipate changes!

#### Structure

- Answer the questions: what are we doing? Where are we doing it? When are we doing it? With whom are we doing it? How long will it take? What will happen afterwards?
- Give instructions one at a time and provide enough time for the child to follow them.
- Make individual timetables for days and tasks.

- Make sure that the school day and tasks follow a clear structure.
- Structure tasks together with the autistic child.
- Encourage and remind.
- Take advantage of the child's interests.
- Organise time and tasks by using calendars, clocks (hourglasses, egg timers), mobile phones, timetables, etc.
- Practice working memory.
- Split tasks into smaller parts.
- Make written and illustrated instructions.
- If necessary, define the child's work space using e.g. a curtain or space divider.

#### Visualise

- Illustrate your speech with objects, images, and texts.
- Use colours and pictures to depict spaces and activities.
- Use e.g. pictures and social stories to illustrate rules.
- Use pictures or written instructions to guide the child.

# Consider sensory sensitivities

- Adapt the environment so that it is sensory-friendly.
- Allow ear plugs, space dividers, sunglasses, smartphones, etc.
- Pay attention to the sounds, materials, temperature, lights, smells, colours, etc. in the environment.
- Pay attention to your own voice.
- Learn to relax.
- Make it possible for the autistic child to take breaks and rebalance their senses in a quiet space.

# Support social skills

- Use direct, concrete language.
- Use social stories, comic strips, films, drama, etc.

- Practice emotional skills with the child.
- Make shared agreements and compromises.
- Notice the child's strengths.
- Encourage him or her to ask for help. Agree on a sign that he or she can use to ask for help, if necessary.
- Pay particular attention to the child during breaks and in other unstructured situations. Encourage him or her to engage in interesting activities and create friendships.

### Other tips

- "Learning by doing", show how to do things.
- Encourage and motivate him or her.
- Give honest, "correct" feedback.
- Teach responsibility and give the child responsibility tasks.

The daily life skills we learn at school follow us into adulthood.

#### **COOPERATION**

A child on the autism spectrum has various needs relating to growth and development. He or she may need daily support relating to care, education, teaching and rehabilitation. Usually a plan is drawn up which can contain all forms of support. If a child has an autism spectrum disorder diagnosis, it is very likely that she or he is receiving rehabilitation, such as speech or behavioural therapy, and sometimes other forms of therapy, too. Rehabilitation appointments can vary greatly, so the majority of rehabilitation and learning new things takes place in daily life in school and at home, outside of rehabilitation itself.

Good cooperation is open and respects the child and their family. The family's expertise is of primary importance. They proba-

bly have the best knowledge of the special characteristics of their child, and for example, what things have achieved the most progress. Cooperation with different parties (family, school, hobbies, therapists) is important to ensure the best support for the child.

#### **HELPFUL LINKS (IN FINNISH)**

Senses

Sensory processing guide: www.tampere.fi/liitteet/n/5nmDdsiHG/AISTI.pdf

Space accessibility checklist (in Finnish): www.autismiliitto.fi/esteettomyyskartoitus



Pictures and instructions: www.papunet.net/materiaalia/ www.tampere.fi/sosiaali-ja-terveyspalvelut/lapsiperheiden-palvelut/ nepsy/selviytymiskeinot/kuvat.html#saanto-jaohjekuvat

Practicing emotional skills: www.oph.fi/fi/oppimateriaali/tunteesta-tunteeseen

Social stories and comic strip conversation (in Finnish): www.voppi.fi/autismin-kirjo/tyovalineita-asperger-henkiloiden-opetukseen-ja-kuntoutukseen/valineita-tunnetaitojen-ja-sosiaalistentaitojen-tukemiseen/video-sosiaaliset-kuvatarinat-ja-sarjakuvitettukeskustelu/

Challenging behaviour
The Haaste -model (Model for preventing and reducing challenging behaviour)
www.autismiliitto.fi/haastemanuaali



Many young people on the autism spectrum experience bullying at school. Intervene in bullying and explain the situation so that all parties understand what is going on, since pupils on the autism spectrum process bullying in a different way from others. Diversity is a positive thing. By understanding diversity, the entire class can learn new things and gain important life skills.

