

Autism and the senses

Around one in every 100 people in the UK is on the autism spectrum. Over 70% of autistic people have significant differences in some or all of their seven main senses...

Sound

Taste

Touch

Vestibular

Sight

Smell

Proprioception



Sight

Some people on the autism spectrum experience some form of sensory difference with their vision and, in some cases, this can cause them physical pain.

Visual Seeker Under responsive

A person with an under-responsive sense of sight may seek experiences to boost the visual input they are receiving. They can be captivated by small details, unnoticed by others, or stare into light sources. Patterns or colours may fascinate.

TIPS TO REDUCE ANXIETY

- A seeker may need night lights to help them sleep.
- Rain stick sensory toy and various apps like Magic Fluids Lite or Magma are great if seeking more visual input.
- Outline or highlight words to help focus.



Visual Avider Over sensitive

Someone with over-sensitive sight may find it difficult to process lots of visual information or maintain eye contact. They might need more time to process this so as not to get completely overloaded.

TIPS TO REDUCE ANXIETY

- Lower lighting.
- Reduce glare.
- Ease up on eye contact
- Remove person from crowded areas or disperse the crowd.
- Consider other sensory differences which may also be impacting upon this or masking other conditions.





Hearing

There are several ways in which autistic people may experience sensory challenges to do with hearing. When people can't tell us how they feel we use an assessment tool called a sensory profile. Some of the challenges faced by an individual on the autistic spectrum dealing with sound include...

Auditory cluttering

Anxiety involving difficulties in filtering and processing sounds, which can be a very painful experience for individuals.

Over sensitive to sound

(hyper-responsive)

A very painful reaction to noises like alarms, bursting balloons, sirens, drills, banging doors, dogs barking and babies crying - even a buzzing insect may cause distress. People may use ear-defenders to block out some of the noises.

Under sensitive to sound

(hypo-responsive)

Someone may be under-sensitive to sound - or to a particular sound - and may seek to experience extreme

volumes of that sound to gain the stimulation they require.

Environmental meaning deafness

(auditory agnosia)

Difficulties processing and understanding sounds even if they have been heard many times, which can be very frightening. A simple reminder such as: "That's the dinner bell, time for dinner," can help with processing and anxiety.

Meaning deafness

(auditory verbal agnosia)

Understanding what language means can sometimes be difficult. Use short,

direct sentences so that the child/adult will have a better chance of understanding the meaning.

Tonal deafness

(tonal agnosia)

An inability to pick up tone, inflection or emphasis from a person's voice. Around 38% of our communication is conveyed in this way, so say what you really mean and be clear and concise.



Smell

According to a recent study, autistic people may not inhale sweet and foul scents in the same way that neurotypical people do. They may even struggle to distinguish between pleasant and unpleasant smells. Some experts argue that this, in itself, could be an indicator of autism although more research is needed.

Smell avoider Over sensitive

A hypersensitive sense of smell creates strong and intense smells out of ordinary, everyday ones. Everyday smells such as spicy foods, scented shampoos or petrol, may overwhelm an autistic person and they may refuse to eat certain foods or go to certain places. Smells can be so overwhelming that they may display unusual behaviours to avoid that smell.



TIPS TO REDUCE ANXIETY

Use fragrance-free cleaning products.

- Use unperfumed toiletries.
- Keep rooms well ventilated.
- Cover nose with tissue.

Smell Seeker Under responsive

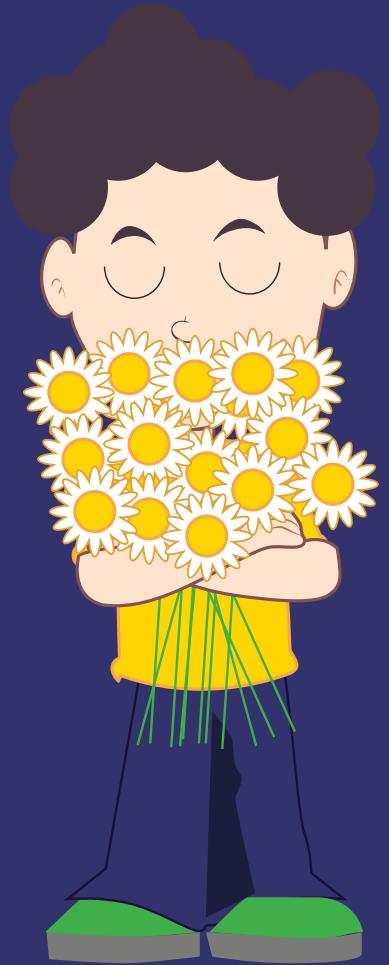
Some autistic people may seek out strong smells. They may be drawn to curry powder, herbs, flowers, essential oils and perfumes. They may even go out of their way to smell things or people, attempting to sniff another's hair or skin.

TIPS TO REDUCE ANXIETY

- Carry a scented hankerchief with preferred scent.
- Use scented hand cream.
- Cooking with strong smells.

Risks potential

Our sense of smell can help us identify danger in our life, such as smoke, escaped gas or food that is off. Individuals on the autism spectrum may not be able to identify things based on smell - or they may have a lack of smell or be unable to identify strong smells.



Vestibular (Balance)

The vestibular system is located in our inner ears. It helps to regulate our sense of balance and body control. It also contributes to our skills in gross and fine motor interaction, from arms and legs to fingers and toes.

When it isn't working typically, autistic people can be seriously affected. It can impede their understanding of what is happening to them and to the world around them.

Vestibular avoider Over sensitive

A debilitating response to motion, typically in the form of motion sickness.

This can be particularly difficult for an autistic person to bear if they don't know what is causing the nausea and can't express their feelings.

This sensation varies from person to person so it may be difficult to determine the cause of the anxiety.



TIPS TO REDUCE ANXIETY

- Repetitive actions like mild rocking or swinging can help to calm an over-stimulated vestibular system by gently controlling the movement. This can also build a tolerance.
- Yoga poses and sitting on the floor may also help.
- The time needed to process these sensations varies.

Vestibular seeker **Under responsive**

A need to seek out experiences to boost body movement. Without this additional movement, the balance we all feel comfortable with may not be achievable. This may appear as hyperactivity, a desire to be on the move all the time, to eagerly accept experiences like fairground rides, swings, rough and tumble or gymnastics. All of these activities will stimulate the senses.

TIPS TO REDUCE ANXIETY

All types of movement can help, such as...

- Dancing.
- Climbing.
- Riding a bike.
- Swimming.
- Using a ball chair or wobble cushion for seated activities.



Proprioception

Proprioception is a sense which tells us where our bodies are in relation to other objects and in open spaces, and also how our different body parts are moving. Proprioceptive receptors are located in our joints and ligaments. They regulate movement and posture and also the appropriate pressure for tasks such as cracking open an egg without crushing it. Some people on the autism spectrum may experience varying differences related to this sense.



Over sensitive

This person might have difficulty understanding where their body is in relation to other objects, thus appearing clumsy, knocking things over, dropping items or misjudging personal space and thus standing too close to others.

They may also have difficulty in regulating pressure, so may break items or struggle with writing because the pressure used on a pen can be so heavy that they may tear the paper.



Under responsive

This person might seek out more sensory input by banging objects, jumping about, stomping when walking, bumping into people or biting or sucking on fingers.

Deep pressure such as tight bear hugs, tight clothing or weighted items such as heavy blankets or bags may be enjoyed.

TIPS TO REDUCE ANXIETY

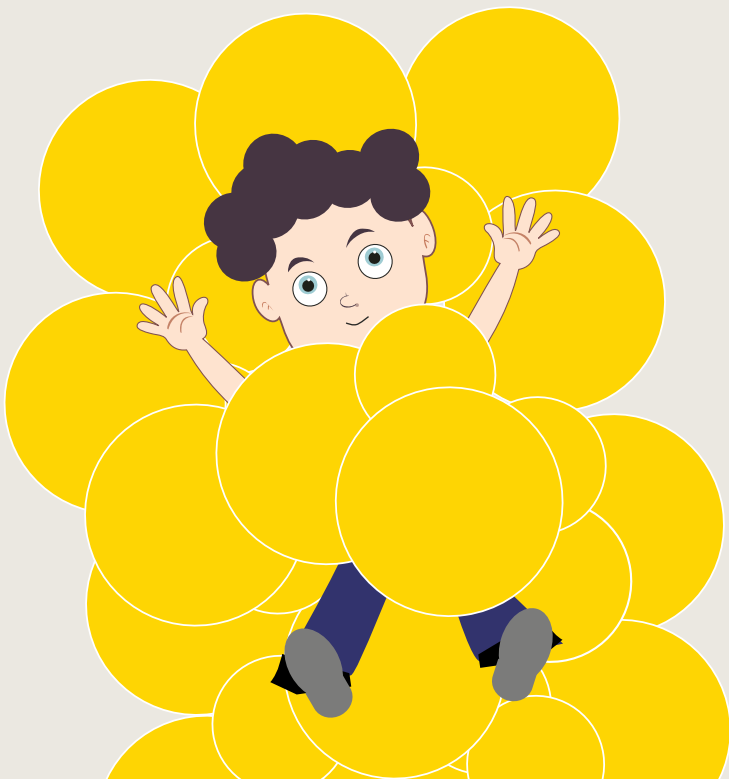
Offer the person simple guidance or practical assistance - for example, explain gently that an arm's length distances is acceptable for personal space. Perhaps trial a weighted backpack if someone needs extra sensory feedback when out walking. Occupational therapists can advise on a wide range of suitable sensory equipment.

Touch

Our tactile sense helps us to interpret information about pressure, texture, movement, vibration, temperature and pain. It also provides us with information that we need for visual perception, body awareness and motor planning. Some people can experience difficulty with processing this tactile information. It can impede a person's understanding of what is happening to them and in the world around them.

Touch seeker **Over sensitive**

Seeking out tactile stimuli, this person may appear to have a high pain threshold. They may self-injure or chew on inedible items or clothing. They may seek out physical touch and different textures to experience. This can include smearing faeces.



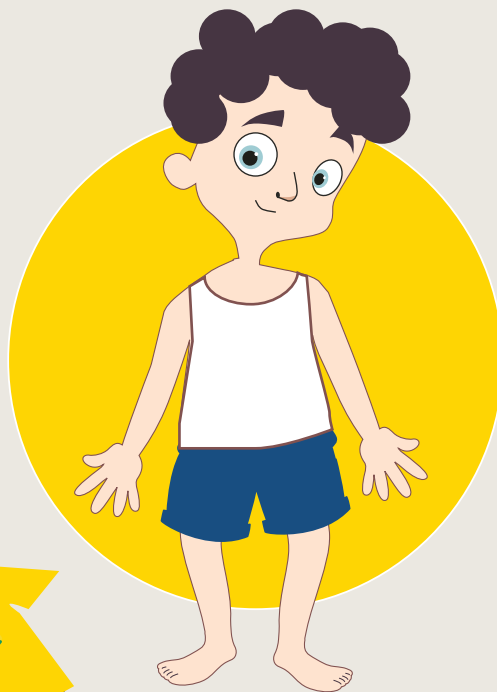
Touch avoider

Under responsive

Withdrawal from or avoidance of certain tactile experiences. A simple touch may feel unpleasant or even painful. The person may also avoid getting 'messy' and avoid eating certain foods, brushing their teeth, bathing or having a haircut. Wearing certain textures of clothing may be unpleasant.

TIPS TO REDUCE ANXIETY

Look for activities which can give similar sensory feedback. For example: if smearing is the behaviour, substitute this for regular, scheduled sessions using items of a similar texture such as Play Doh or jelly. Seamless clothes can be more comfortable if they are closest to the skin, also remove labels and any scratchy items.



Additional support

Your GP may refer you to see an Occupational Therapist. They can advise on a wide range of sensory equipment and programmes to support these sensory differences.



Taste

Sweet, sour, bitter or salty are the four main taste areas on the tongue. Some people may prefer foods from one of these groups, or foods of a certain texture or temperature. Some may only eat foods of a certain colour.

Under responsive

Some people may prefer foods that are very spicy or they may even pick up and taste, or even eat, non-edible items such as grass, stones, and soil. This is known as 'pica'.

Over sensitive

For others, tastes and flavours can seem too strong. Their diets may be limited to what they can tolerate. It may be that odours from certain foods are too strong for them to cope with so they limit their food to certain textures, appearances and flavours.



TIPS TO REDUCE ANXIETY

- New foods can be introduced by making them similar in texture and colour to the person's preferred food tastes.
- Write a short information sheet that puts the food into a very positive light that will encourage the person to want to try it.
- Put a small piece of 'new food' near the person's plate until gradually it can be placed on the plate. This could take several days or even weeks.

About us...

Autism Together is a charity and service provider which has been providing specialist support for people on the autism spectrum for over 50 years.

Founded in Wirral in 1968 by a group of concerned parents, the organisation currently supports over 400 adults and many more families, through services in Wirral, Cheshire and North Wales.

Our charity provides residential care, supported living, community and vocational services, children and family services, along with specialist autism training and advice sessions.

We understand that every autistic person is unique, so we work with each individual to help them overcome the difficulties autism presents them with, helping them to lead a happy and fulfilling life.



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