

SENSORY PROCESSING

This fact sheet has been written by parent carers for parent carers



What are sensory processing differences?

Everyone processes information from their senses differently. Some of us love certain smells for example, whilst others can't bear them. Or we might like going to gigs or clubs while others avoid anywhere with loud music. As long as we can manage to take part in the things we want and need to do our sensory processing differences don't matter.

For some people, however, the way their mind processes sensory information can cause problems with daily living, social skills, school work and behaviour, and this may lead to a diagnosis of sensory processing difficulties.

Sensory processing difficulties (SPD) may be a stand-alone condition or it may be combined with autism, ADHD, dyspraxia, dyslexia or learning disabilities.

Causes of sensory processing differences

Humans get sensory input from the world around them in eight ways; touch, taste, smell, hearing, sight, and from 'hidden' senses called *proprioception*, *interoception* and the *vestibular system*.

Proprioception is the sense that tells the body where it is in space and lets us know where our different body parts are, how they move and how much strength our muscles need to use. *Interoception* is the sense that tells us what is happening inside our bodies (growling stomach, full bladder, etc.) and prompts feelings that make us to eat or go to the loo. The *vestibular system* tells us how we are moving via senses in our ears; it controls our sense of balance, gravity and speed of movement.

In people with sensory processing issues, the brain is unable to organise the information it receives from these senses as well as it should, so they may be over or under-responsive to environmental or internal stimuli. For example, a child who is over-responsive to sound will try to avoid loud noises. A child who is under-responsive may actively seek out noise. This is often referred to as sensory avoiding and sensory seeking behaviour.

It is possible for people to be over-responsive in some senses and under-responsive in others.

Characteristics of sensory processing differences

Here are some of the more common signs that a child or young person may have sensory processing differences:

- **Sight** – may be sensitive to lights and busy places with lots of movement, or may seek out colours and light.
- **Touch** – may not like being touched (often called being 'tactile defensive') and may find haircuts/hairbrushing difficult. They may dislike clothes or certain clothes and fabrics, messy play and getting their hands dirty. Or they may enjoy touching people and things, wearing tight clothing or squeezing into small spaces. These differences can mean children and young people with sensory processing issues struggle with social expectations around touching; they may grab the hand of a stranger, for instance, or wipe away a kiss.
- **Taste** – may have difficulties with trying different tastes and textures, especially unfamiliar ones.



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This is not just about being picky. SPD heightens how things taste, feel, or sound and can sometimes trigger strong responses such as gagging from a given food, smell, etc. Children with SPD may also put objects in their mouth, or chew things such as sleeves or pens.

- **Hearing** – being sensitive to loud or sudden noises such as hand dryers, or easily distracted by background noise. Or they may like repetitive sounds or making loud noises.
- **Movement (vestibular)** – spinning, rocking, flapping, being fidgety or stimming (repetitive movements or vocalisations).
- **Body awareness (proprioception)** – being ‘clumsy’, having difficulty balancing and problems with handwriting and other fine motor skills such as doing up clothing, using cutlery.
- **Body awareness (interoception)** - difficulty recognising being tired, hungry or cold or knowing when to go to the loo.

Children and young people with sensory processing issues may also have difficulties recognising and regulating their emotions and this can affect their mental health.

Getting a diagnosis

Sensory processing disorder is not recognised as a standalone diagnosis within the NHS, but sensory processing difficulties are recognised and are usually identified by occupational therapists. Occupational therapists, physiotherapists or speech and language therapists may sometimes offer sensory integration therapy in private practice, having completed post graduate courses offered by <https://www.sensoryintegrationeducation.com>.

What can help?

- **Equipment and adaptations** - these can really help and you don't need to wait for your child's school or therapist to provide them; there are lots of sensory equipment shops online and they will give you ideas for things that might work for your child. At school, ear defenders, chewable pencil tops or grips, fidget toys and weighted lap blankets can all help your child to focus on learning in the classroom. At home you may want to invest in things like seamless socks, elastic laces and waistbands to make dressing easier. And weighted vests or blankets, massage tools, brushes or sensory swings can help children with sensory integration and de-stressing.
- **Just Right** (Brighton & Hove) and **Zones of Regulation** (East Sussex) - these are different names for similar approaches used to support sensory and emotional regulation in children and young people. Just Right and Zones of Regulation both use a scaling system, with four colour 'zones' to help children understand and communicate the emotions they are experiencing and how to manage them. Ask your child's teacher or the school SENCO for more information.
- **Sensory integration therapy** - can help children to overcome sensory processing issues by training the brain to change its response. Depending on the child's particular needs, therapy may be one-to-one with specialist equipment, or the therapist may look at ways to adapt the environment at home and school. A therapist may also draw up a '**sensory diet**' of activities that can be done at home and school. These activities consist of specific types of sensory input to help your child regulate and learn how to process sensory input more effectively. Sensory diets are unique to the individual and their needs and there is likely to be some experimentation along the way to find what works for your child.
- **Reasonable adjustments** - at school, children and young people with SPD should be able to use ear defenders or fidget toys or any other equipment that helps. They may also get extra time and equipment or a quiet space for their exams. Speak to your child's teacher or SENCO.





Ask about

- **Amaze - ND Family Support Service** is for families with children and young people under 25, before and after assessment for neurodevelopmental differences including sensory processing. Your child does not need a diagnosis to get support. Email NDP@amazesussex.org.uk or refer yourself to the service here <https://amazesussex.org.uk/nd-family-support>
- **Amaze - SENDIASS (Special Educational Needs and Disability Information, Advice and Support Service)** offers impartial, confidential advice on anything to do with SEND for 0 to 25 year olds. Parents, carers, children and young people under 25 with SEND living or going to school in Brighton & Hove or East Sussex can use the service. Email sendiass@amazesussex.org.uk, call **01273 772289** or visit <https://amazesussex.org.uk>
- **Amaze - Parent groups & befriending** – one to one befriending and regular support groups for parent carers across Brighton & Hove and East Sussex, including groups with a focus on neurodevelopmental differences like autism and ADHD. For details of all our groups, visit <https://amazesussex.org.uk/parent-groups-and-befriending>, call: **07484 051755** or email: marie@amazesussex.org.uk
- **Child Development Teams** - consultant paediatricians, specialist nurses and therapists who assess and support children. Ask your GP, health visitor, your child's school or another professional working with your child for a referral. In Brighton & Hove this service is based at the **Seaside View** Child Development Centre. In East Sussex, it is based at **Community Paediatrics Parkview** in Bexhill, Kipling Outpatient Dept in Hastings and satellite clinics.
- **Sensory equipment shops online** - national disability charity, Contact, has a sensory equipment online shop called Fledglings <https://www.fledglings.org.uk> and there are others including <https://www.sensorydirect.com> or <https://www.exploreyoursenses.co.uk>. Amazon also has a whole section full of sensory equipment and toys.
- **Online parent support groups** - there are quite a few Facebook support groups for families with children with SPD which are a great way to get advice and tips and share experiences. Just search 'sensory processing UK' in the Facebook search box.

Further reading and useful links

- **What is sensory processing?** - Youtube video from occupational therapists at Sussex Community NHS Foundation Trust. <https://www.youtube.com/watch?v=qwUHLVNMWzI>
- **Sensory modulation** - Youtube advice video from occupational therapists at Sussex Community NHS Foundation Trust <https://youtu.be/6KcmOIZ1BO0>
- **Occupational Therapy team videos** - Sussex Community NHS Foundation Trust occupational therapists have produced a suite of Youtube videos around sensory processing. <https://www.youtube.com/playlist?list=PLj42uobe68oH7zb5L98sSUHAq5RPMGjXO>
- **Building Bridges through Sensory Integration** by Paula Aquilla, Shirley Sutton & Ellen Yack (Future Horizons, ISBN: 978-1935567455).
- **Cerebra** – <https://cerebra.org.uk> - search for sensory integration therapy.
- **Local Offer** – the local authority's online listing of all the services and support for families with children with SEND in the area. East Sussex Local Offer <https://localoffer.eastsussex.gov.uk/> Brighton & Hove Local Offer <https://www.brighton-hove.gov.uk/special-educational-needs-and-disabilities>.



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- **The National Autistic Society** – <https://autism.org.uk/advice-and-guidance/topics/sensory-differences/sensory-differences/all-audiences>
- **The Out of Sync Child** – website: www.out-of-sync-child.com. Publishes various books including: ***The Out of Sync Child*** by Carol Stock Kranowitz (Perigee Books ISBN: 978-0399531651).
- ***Sensational Kids; Hope and help for children with sensory processing disorder (SPD)*** by Lucy Jane Miller (Penguin Random House USA ISBN: 978-0399167829).
- **The Sensory Integration Network** – <https://www.sensoryintegration.org.uk>.
- ***Too Loud, Too Bright, Too Fast, Too Tight: What to do if you are sensory defensive in an overstimulating world*** by Sharon Heller (Harper Perennial ISBN: 978-0060932923).

