Sensory processing in autism

Summary

• Many people with autism find it difficult to process everyday sensory information such as sights, sounds and smells.
• People with autism can be over- or under-responsive (often termed hyper- or hypo-sensitive, respectively) in any or all of the seven sensory areas: sight, sound, touch, taste, smell, balance, and body awareness.
• It can sometimes be difficult to identify that sensory difficulties are at the root of a person’s behaviour.
• It is good practice to ask the victim, witness, suspect or defendant with autism (or their parent/carer) whether they have any sensory difficulties and if any adaptations are necessary.
• It helps to be aware of how sensory difficulties may impact on a person with autism, and to ask advice from parents, professionals and/or the person with autism themselves regarding what the problems are, how these may manifest themselves in certain settings (e.g., during interview, at court) and how best to deal with them.
• Be aware of the array of sensory difficulties that a person with autism may experience; can you notice anything in the environment that is creating any difficulties? Can you change anything to assist them?

‘The lights in the room hurt my eyes…they were really bright. There were lots of colours too; the walls were pink and grey, the cushions were red, the carpets were blue. I don’t like anything blue, so I tried not to look at the carpets. I didn’t like the chairs either…they were scratching against my arms every time I moved. It was all too much…I found it really difficult to concentrate on what the police officer was asking me’.

A victim with autism discussing the police interview room

The sensory world of autism

Many people with autism find it difficult to process everyday sensory information such as sights, sounds and smells. This can have a profound effect on the person’s ability to give evidence as a victim, witness, suspect or defendant. It may also exacerbate the difficulties that the person experiences when communicating with criminal justice professionals. When people with autism struggle to cope with sensory information in the environment, they may become stressed or anxious, and may even experience physical pain. Sometimes, this may lead the individual to behave in a manner that requires police
Overall, this poses a serious problem for many children and adults with autism.

**Examples of sensory difficulties**

People with autism can be over- or under-responsive (often termed hyper- or hypo-sensitive, respectively) in any or all of the seven sensory areas: sight, sound, touch, taste, smell, balance (vestibular), and body awareness (proprioception). General sensory overload is also common, whereby people with autism struggle to process information from more than one sense simultaneously. Examples of common sensory problems across each of the seven senses are given below:

**Sight**

- Colours (sometimes one colour in particular) or lights may be too bright to look at directly or for prolonged periods of time (e.g., if in an interview room for a significant period)
- Distortions: static objects or lights may appear to move around

**Sound**

- May be particularly sensitive to certain sounds (e.g., police sirens), which can cause distress
- Inability to block out background noise, which may lead to difficulties with concentration

**Touch**

- Even the slightest touch may be painful or uncomfortable (either from people or objects, e.g., handcuffs)
- Dislike of certain textures (e.g., leather chairs, cotton clothing)

**Taste**

- Eats everything (e.g., paper, hair) – this is known as pica
- May lick things to get a better sense of what they are

**Smell**

- Certain smells may be intense and overpowering, leading to concentration difficulties
- Can develop a dislike of people with strong or distinctive perfumes, deodorants, etc.

**Balance**

- Desire to rock, swing, or spin; may be used as a coping strategy
- Motion sickness

**Body awareness**
- May stand too close to others as they are unable to measure their proximity to people/objects and judge their own personal space
- Difficulties with navigating around rooms; may move whole body to look at something

How to identify sensory problems in people with autism

It can sometimes be difficult to identify that sensory difficulties are at the root of a person’s behaviour. Sometimes, people with autism develop coping strategies to deal with their sensory problems (e.g., rocking, swinging) and these may be seen as the ‘problem behaviours’ that need to be addressed, rather than the underlying sensory difficulty.

It helps to be aware of how sensory difficulties may impact on a person with autism, and to ask advice from parents, professionals and/or the person with autism themselves regarding what the problems are, how these may manifest themselves in certain settings (e.g., during interview, at court) and how best to deal with them.

‘The boy was screaming and hitting his head with his hands…I didn’t know what to do, whether or not to intervene. His mum explained that it was how he behaved when his eyes hurt because of the lights or colours in the room. When we dimmed the lights, he calmed down’.

*Police officer on interviewing a child with autism*

How sensory problems affect behaviour

If a person with autism is overloaded with sensory information from the environment, they may find it difficult to concentrate; it may prove difficult for them to listen to the questions being put to them, or to respond adequately.

Sometimes, people with autism may develop coping strategies to deal with their sensory difficulties. These may be overt (e.g., closing their eyes, humming to drown out external noise) or covert (e.g., blocking out speech to focus on body language).

It is possible that the sensory problems experienced by individuals with autism may lead to criminal involvement; for example, a person with autism who is averse to touch may over-react to being innocently knocked in the street and lodge an accusation of assault; an extreme sensory reaction that a person is unable to cope with may lead to them lashing out and assaulting another person.

Strategies for dealing with sensory problems in autism

It is good practice to ask the victim, witness or defendant with autism (or their parent/carer) whether they have any sensory difficulties and if any adaptations are necessary. For example, the person may respond better if the lights in the room are dimmed, or if items of a certain colour/texture are removed.

Be aware of the array of sensory difficulties that a person with autism may experience; can you notice anything in the environment that is creating any difficulties? Can you change anything to assist them (e.g., considering whether handcuffs are necessary,
incorporating regular breaks into the interview, appreciating the difficulties with police cells and assessing whether adaptations are possible)?

Further reading


By Dr Laura Crane BSc (Hons) MSc PhD MBPsS, City University, London