sensory Exploration

Lori Sacrey, MC

Sensory Exploration

Sensory Systems

All information our brain takes in is sensory in nature. If brains attended to 100% of the information coming it, we would be constantly overwhelmed. Because of this, humans come with filtering systems to decrease the amount of information coming in.

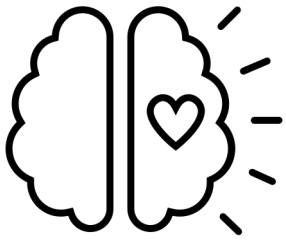
Neurodivergent brains may filter the same amount of sensory information as neurotypical/allistic brains.

Alternatively, the filtering system of neurodivergent brains *can be different* from those of allistic brains in two ways:

1. The filter lets in comparatively more sensory information = **hypersensitive**

2. The filter lets in comparatively less sensory information = **hyposensitive**

What do these filtering systems look like? Let's use the auditory (sounds) system to illustrate:



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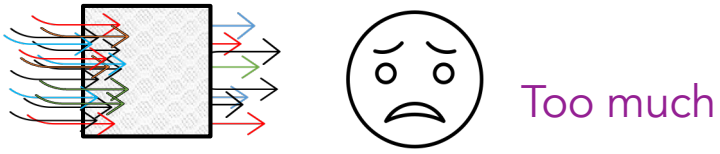
Sensory Systems

People with hypersensitive filters may

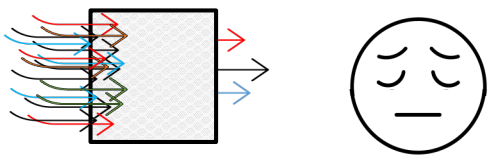
- Find a small amount of information activates them (e.g., may hear noises others cannot)
- Go into fight or flight mode (e.g., overwhelmed or 'meltdown')
- Find ongoing information uncomfortable (e.g., repetitive noise is grating)
- Avoid out sensory information (e.g., stay away from areas with certain noises)



Too much

People with hyposensitive filters may

- Be less aware of sensory information (e.g., may not hear noise)
- Need more sensory information (e.g., need louder or repetitive noises)
- Be slower or not respond to information (e.g., may need more prompts)
- Seek out sensory info (e.g., make noises)



Not enough

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Each sensory system may have its own filter. So, one could be either hyper-sensitive, hypo-sensitive, or may filter similarly to the neuro-majority across each domain.

Smell system

Below are a list of potential impacts of hyposensitivity and hypersensitivity on the olfactory system. Check off all that apply to you

Hyposensitive:

- ❑ May not notice smells
- ❑ May prefer strong smells and tastes
- ❑ May like to smell everything
- ❑ May seek out strong smells
- ❑ May like the smell of cleaning products
- ❑ May seek out floral scents
- ❑ Other: _____

Hypersensitive:

- ❑ May have a strong smell intolerance
- ❑ May not like the smell of smoke or pollution
- ❑ May avoid foods with certain smells
- ❑ May avoid chemical smells
- ❑ May prefer tasteless foods
- ❑ May gag or become upset at strong smells
- ❑ May have a restricted diet
- ❑ Other: _____

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Smell system

Considering how you responded to the previous items, what are your sensory preferences and how can you accommodate your preferences?

Example preferences include:

Aromatherapy
Baking related scent
Incense
Scent free
Fresh or clean scents
Low pollution areas

Example Accommodations include:

Places that have lots of smells (soap shop, flower shop)
Place with low odours

Sensory Exploration

Taste system

Below are a list of potential impacts of hyposensitivity and hypersensitivity on the taste system. Check off all that apply to you

Hyposensitive:

- ❑ May like to put things in their mouth
- ❑ May seek out strong flavours
- ❑ May like sour flavours
- ❑ May lick things
- ❑ May crave certain flavors
- ❑ Other: _____

Hypersensitive:

- ❑ May not like certain textures to tastes
- ❑ Food temperatures affect you
- ❑ May prefer a predictable diet
- ❑ May not like unfamiliar or new foods
- ❑ May prefer foods that are the same each time (e.g., crackers over fruit)
- ❑ May find flavourful food overwhelming
- ❑ May have food allergies
- ❑ Other: _____

Sensory Exploration

Taste system

Considering how you responded to the previous items, what are your sensory preferences and how can you accommodate your preferences?

Example preferences include:

Chewing gum or candy
Chewing ice
Strong flavoured foods
Water
Crunchy snacks
Safety foods

Example Accommodations include:

Keeping gum in your pocket/purse
Having safety snacks with you

Sensory Exploration

Visual system

Below are a list of potential impacts of hyposensitivity and hypersensitivity on the visual system. Check off all that apply to you

Hyposensitive:

- ❑ Can struggle to find people in crowded place (e.g., school yard)
- ❑ Can struggle to find something in busy backgrounds (e.g., messy room)
- ❑ Can struggle to keep track of where they are when reading (e.g., next line)
- ❑ May like watching things move across their visual field (e.g., flicking fingers in front of eyes)
- ❑ May like flashing lights or other repetitive visual stimuli (e.g., lava lamp)
- ❑ May have poor depth perception
- ❑ Other: _____

Hypersensitive:

- ❑ Sensitive to bright light, fluorescent lights, sunlight, or certain colours
- ❑ Sensitive to flickering or flashing lights
- ❑ Prefer dimly light spaces
- ❑ May not like making eye contact
- ❑ Certain patterns may be overwhelming
- ❑ Overwhelmed by visual changes in environment (e.g., moving furniture around)
- ❑ May use peripheral vision to look at things (limits amount of visual info coming in)
- ❑ May blink a lot
- ❑ May need complete darkness while trying to sleep
- ❑ Other: _____

Sensory Exploration

Visual system

Considering how you responded to the previous items, what are your sensory preferences and how can you accommodate your preferences?

Example preferences include:

- Bright lights
- Patterns
- Colourful decorations
- Low lighting
- Visually organized and uncluttered
- Neutral colours

Example Accommodations include:

- Decorate your place with colourful and stimulating décor
- Use lamps instead of overhead lighting

Sensory Exploration

Auditory system

Below are a list of potential impacts of hyposensitivity and hypersensitivity on the auditory system. Check off all that apply to you

Hyposensitive:

- ❑ May not respond to name or instructions
- ❑ May zone out (e.g., look like they are daydreaming)
- ❑ Can struggle to remember what was said (e.g., may say 'what' a lot)
- ❑ May not be able to tell the difference between similar sounds
- ❑ May make noises (be loud, bang objects together, hum, or sing)
- ❑ May tap or bang things to hear the sound
- ❑ May turn TV or music up very loudly
- ❑ May prefer to listen to the same song or TV show on repeat
- ❑ May make repetitive noises (clicking pen over and over)
- ❑ Other: _____

Hypersensitive:

- ❑ May have difficulty ignoring sounds in the background (e.g., talking in another room)
- ❑ May hear sounds that others cannot hear (e.g., high or low frequencies)
- ❑ May make own sounds to block out sounds they do not like
- ❑ May struggle in rooms with a lot of people or sound and want to leave
- ❑ May startle when hear sudden or loud noises
- ❑ May dislike high-pitched sounds
- ❑ Other: _____

Sensory Exploration

Auditory system

Considering how you responded to the previous items, what are your sensory preferences and how can you accommodate your preferences?

Example preferences include:

Background music
Background TV
Sound machine
Library-level quiet
Private spaces
Being outside

Example Accommodations include:

Go to places that provide the ambiance (background noises) you prefer

Keep noise cancelling ear plugs in your purse/pocket

Sensory Exploration

Tactile system

Below are a list of potential impacts of hyposensitivity and hypersensitivity on the tactile system. Check off all that apply to you

Hyposensitive:

- ❑ May be unaware of light touches (e.g., need firm pressure to 'feel' touch)
- ❑ May be more aggressive in the physical contact with others
- ❑ May drop items due to differences in holding (e.g., may hold too lightly)
- ❑ May use mouth to explore objects (e.g., holding things in mouth)
- ❑ May enjoy messy play (e.g., painting, clay)
- ❑ May seek out certain textures (e.g., rough or smooth)
- ❑ May like tight clothing
- ❑ Other: _____

Hypersensitive:

- ❑ May not like being touched, especially if unexpected
- ❑ Hair brushing may be uncomfortable
- ❑ May not like certain fabrics , scratchy materials, or tags
- ❑ May not like getting dirty (e.g., sticky or muddy)
- ❑ May walk on toes or refuse to walk on certain surfaces
- ❑ May not like certain food textures
- ❑ May not like wet textures (including face washing)
- ❑ Other: _____

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Tactile system

Considering how you responded to the previous items, what are your sensory preferences and how can you accommodate your preferences?

Example preferences include:

Deep pressure

Petting animals

Certain fabrics

Cutting off tags from clothes

Being sockless

Weighted blanket

Example Accommodations include:

Having a wardrobe of clothes that feel comfortable on your body

Engage in hobbies that use your hands, like pottery

Sensory Exploration

Interoception system

Below are a list of potential impacts of hyposensitivity and hypersensitivity on the interoceptive system. Check off all that apply to you

Hyposensitive:

- ❑ May have little reaction to pain
- ❑ May not notice changes in temperature
- ❑ May not feel hunger or thirst
- ❑ May find it difficult to understand what they are feeling
- ❑ Other: _____

Hypersensitive:

- ❑ May dislike certain temperatures (too warm or too cold?
- ❑ May notice small changes in physiological system (changes in heartbeat or breathing)
- ❑ May feel pain deeply
- ❑ May dislike humid environments
- ❑ May feel emotions deeply (e.g., "too sensitive")
- ❑ May not like stuffy or stagnant air
- ❑ Other: _____

Sensory Exploration

Interoception system

Considering how you responded to the previous items, what are your sensory preferences and how can you accommodate your preferences?

Example preferences include:

Cool temperatures

Several kinds of drinks at the same time

Warm temperatures

Snacking throughout the day

Warm showers

Example Accommodations include:

Dressing in layers to accommodate changes in temperature

Set times to remind yourself to eat drink, and take bathroom breaks

Sensory Exploration

Vestibular system

Below are a list of potential impacts of hyposensitivity and hypersensitivity on the vestibular system. Check off all that apply to you

Hyposensitive:

- ❑ May seek out movement (e.g., spinning, bouncing, shake head, etc.)
- ❑ May be a thrill seeker (e.g., love amusement park rides)
- ❑ May like rapid changes in motion
- ❑ May like intense physical activity
- ❑ May not get dizzy
- ❑ May like hanging upside down
- ❑ May like to rock back and forth
- ❑ May like certain types of transport (elevator, cars, trains)
- ❑ Other: _____

Hypersensitive:

- ❑ May avoid swinging, spinning, or sliding
- ❑ May have a fear of heights
- ❑ May get motion sickness
- ❑ May lose balance
- ❑ Other: _____

Sensory Exploration

Vestibular system

Considering how you responded to the previous items, what are your sensory preferences and how can you accommodate your preferences?

Example preferences include:

- Spinning
- Hanging upside down
- Jumping
- Sitting
- Gentle rocking or swaying
- Gentle stretching

Example Accommodations include:

- Engage in activities with lots of movement (e.g., swinging)
- Create yourself a comfy sitting nook

Sensory Exploration

Proprioceptive System

Below are a list of potential impacts of hyposensitivity and hypersensitivity on the proprioceptive system. Check off all that apply to you

Hyposensitive:

- ❑ May appear clumsy (e.g., tripping over things or banging into objects)
- ❑ May move around a lot
- ❑ May like to be wrapped up in blankets or tucked tightly in bed
- ❑ May fidget quite a bit
- ❑ May have trouble balancing
- ❑ May prefer tight clothes
- ❑ May use alternative seating
- ❑ Other: _____

Hypersensitive:

- ❑ May prefer to remain seated
- ❑ May find certain surfaces/seating uncomfortable
- ❑ May lean against things or people
- ❑ May have difficultly with fine motor skills (e.g., holding a pencil, picking up small items)
- ❑ May not like tight footwear
- ❑ May prefer baggy clothes
- ❑ May not like crowds
- ❑ Other: _____

Sensory Exploration

Proprioceptive System

Considering how you responded to the previous items, what are your sensory preferences and how can you accommodate your preferences?

Example preferences include:

Being wrapped up/pressure
Movement seeking
Lifting weights
No pressure
Leaning against things
Using alternative seating

Example Accommodations include:

Giving self time to fidget or stim
Wear loose or baggy clothes

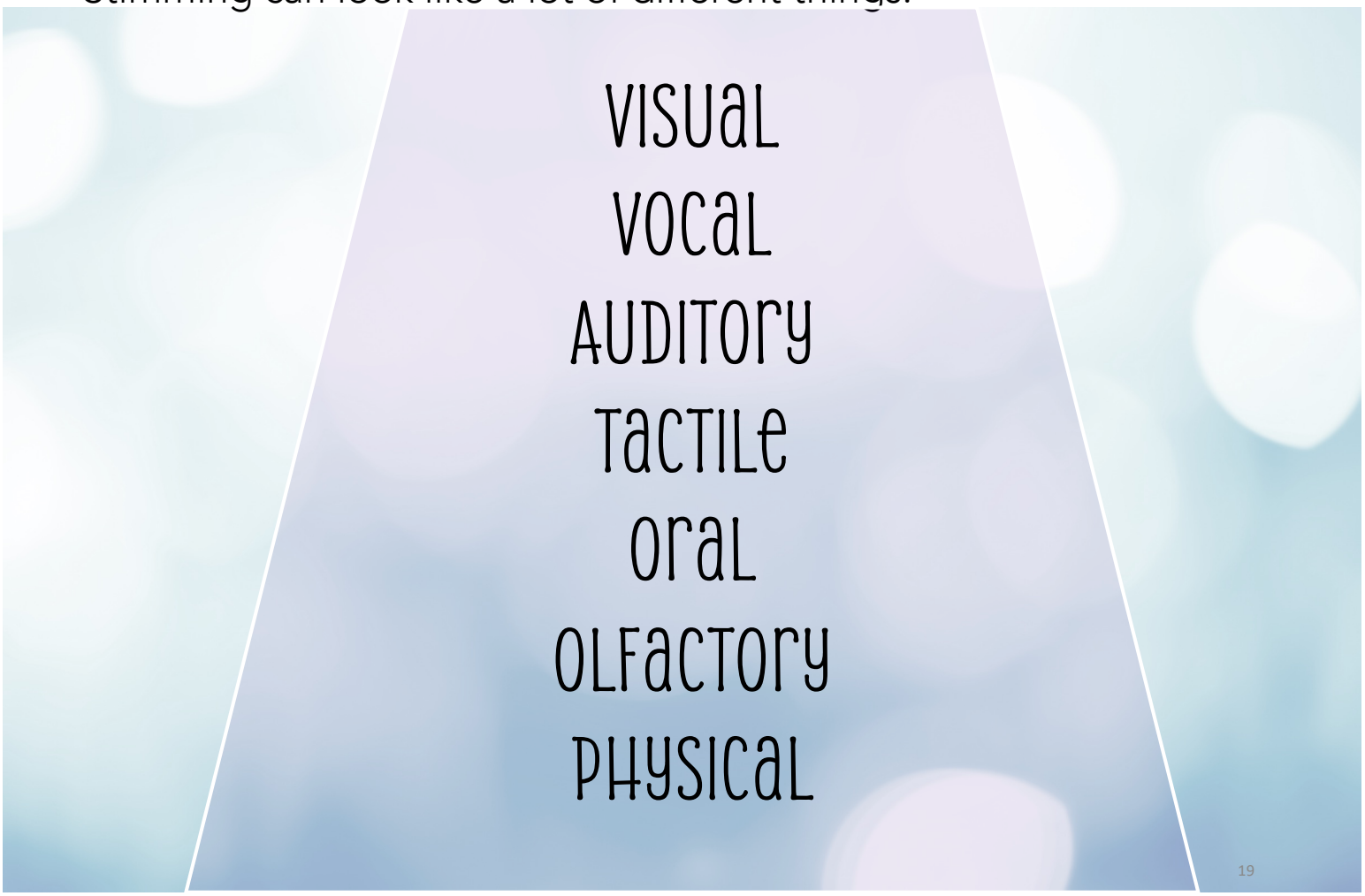
STIMMING

Two of the ways to help recover from autistic burnout and manage stress are to lean into your RRB's. RRBs are one of the two diagnostic categories of autism – "*restricted interests and repetitive behaviours*"[1]

I don't care for this terminology and choose to call them preferred interests and behaviours.

Once such preferred activity is stimming. Stimming is an important method to help with emotional and sensory regulation. Stimming can help manage stress that can contribute to, or worsen, burnout. It is also fun and enjoyable!

Stimming can look like a lot of different things:[2-4]



(1. APA, 2013; 2. Mantzalas et al., 2022a; 3.Higgins et al., 2021; 4. Raymaker et al., 2020)

STIMMING

1 Visual

It may include

- Moving fingers in front of the eyes
- Looking at moving objects, such as ceiling fans or lava lamps
- Repetitively blinking eyes or turning lights on and off
- Object placement, such as lining up objects in a certain order

WAYS I VISUALLY STIM

STIMMING

2 Vocal

It may include

- Humming or whistling
- Making animal sounds
- Singing a song lyric
- Repeating the same phrase over and over
- Shouting or speaking with a different intonation

WAYS I VOCALLY STIM

STIMMING

3 Auditory

It may include

- Clicking pens
- Fidgets that click
- Tapping ears
- Covering and uncovering ears
- Listening to the same song over and over
- Wearing noise-cancelling headphones

WAYS I AUDITORY STIM

STIMMING

4 Tactile

It may include

- Fidget cubes or spinners rings
- Slime, play doh, or silly putty
- Petting animals
- Soft objects (fluffy socks, stuffed animal)
- Rubbing hand against different textures

WAYS I TACTICALLY STIM

STIMMING

5 Oral

It may include

- Bite or lick food
- Eating same food everyday
- Hard candy or peppermint for grounding
- Multiple drinks (flavours) at the same time
- Chewable jewelry or specialized objects for chewing

WAYS I ORALLY STIM

STIMMING

6 Olfactory

It may include

- Smelling perfume or cologne
- Sniffing clean laundry
- Using essential oils/aromatherapy
- Diffusers or air fresheners

WAYS I OLFACTORY STIM

STIMMING

7 Physical

It may include

- Swing or spins
- Amusement park rides
- Rocking or toe walking
- Hand or finger movements
- Weighted blankets or body socks

WAYS I PHYSICALLY STIM

STIMMING

8 OTHER

Any other ways you stim that you feel did not fit into the other categories

OTHER WAYS I STIM

Preferred Activities

Engaging in topics in which one is very interested in or very knowledgeable can help manage stress and burnout. Preferred interests can provide pleasure, familiarity, and calming influence during times of stress and can help facilitate self-identity, emotional regulation, and self-efficacy. [1-3]

It is important to remember that during times of burnout, it may be more difficult to engage in interests if one lacks the energy to engage in them, which can exacerbate feelings of burnout[1-3]

Thus, depending on your preferred interests, engaging in preferred activities may be a strategy that you use during later stages of your recovery.

Common categories of preferred interests include:[4]

(1. Mantzalas et al., 2022a; 2.Higgins et al., 2021; 3. Raymaker et al., 2020; 4. Nowell et al., 2021)

Preferred Activities

1 Pop Culture

It may include

- YouTube
- Preferred movies or tv shows
- Playing music, listening to Spotify
- Sporting events or sport statistics

Pop culture preferences

(From Nowell et al., 2021)

Preferred Activities

2 Objects

It may include

- Favourite object
- Preferred toys, blanket, piece of clothing
- Collecting objects (Pokémon cards, rocks)
- Books
- Vehicles (types of cars, planes)

Object preferences

(From Nowell et al., 2021)

Preferred Activities

3 Animals

It may include

- Wild animals (whales, sharks)
- Domesticated animals (cats, dogs, birds)
- Pets

Preferred Animals

(From Nowell et al., 2021)

Preferred Activities

4 Creativity

It may include

- Drawing or painting
- Clay or kinetic sand
- Wood working
- Building Legos
- Dancing

creative interest

(From Nowell et al., 2021)

Preferred Activities

5 Technology

It may include

- Video games
  Smart phones
- Computers, apps, or coding
- How things work (machinery, vehicles)

Tech interests

(From Nowell et al., 2021)

Preferred Activities

6 Educational

It may include

- Puzzles
- Numbers and math facts
- Reading and writing
- Outer space knowledge
- Historical events

Educational Interests

(From Nowell et al., 2021)

Preferred Activities

7 Social Justice

It may include interests in

- Racial equality
- Gender equality
- LGBTQIA+ equality
- Capitalism and patriarchy

Social Justice Interests

(From Nowell et al., 2021)

Preferred Activities

8 Other

Any other preferred interests that you feel did not fit into the previous categories

other interests