

# AUTISM AND SENSORY SENSITIVITY: UNDERSTANDING AND SUPPORTING SENSORY NEEDS

A Guide for Caregivers, Educators, and Support Staff



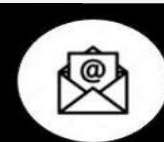
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# Scope

- ✓ What is Sensory Processing, and How Does it Differ in Autistic Individuals?
- ✓ The Neurological Basis of Sensory Sensitivities in Autism
- ✓ Common Sensory Challenges and How They Manifest in Daily Life
- ✓ Types of Sensory Sensitivities: Hypersensitivity vs. Hyposensitivity
- ✓ Sensory Challenges Related to Touch, Sound, Light, Smell, Taste, and Movement
- ✓ The Impact of Sensory Overload on Behavior and Communication
- ✓ Recognizing and Responding to Sensory Needs
- ✓ Creating Sensory-Friendly Environments
- ✓ Supporting Sensory Regulation
- ✓ Collaborating with Autistic Individuals

# What is Sensory Processing, and How Does it Differ in Autistic Individuals?

- Sensory Processing refers to how the nervous system receives, organizes, and responds to sensory inputs.
- In individuals with Autism Spectrum Disorder (ASD), sensory processing can be atypical, leading to challenges in interpreting sensory stimuli from their environment.
- This difference can manifest as over- or under-responsiveness to sensory inputs, known as hypersensitivity and hyposensitivity, respectively

# The Neurological Basis of Sensory Sensitivities in Autism

- Research indicates that individuals with ASD often have distinct neural responses, with differences in sensory regions of the brain, including altered thresholds for activation.
- For example, autistic adults report high rates of sensory over-responsivity, meaning that stimuli can more quickly exceed sensory thresholds, causing discomfort or distress.
- This neurological difference is associated with atypical brain connectivity and processing, particularly in regions responsible for sensory modulation

# Common Sensory Challenges and How They Manifest in Daily Life

- Sensory challenges in autism can affect everyday activities, such as discomfort with specific sounds or textures, or a need for constant movement.
- For example, certain sounds may seem overwhelmingly loud, causing individuals to cover their ears, or they may seek tactile input by touching specific textures.
- Sensory difficulties often lead to avoidance of situations like noisy public spaces or, conversely, seeking out intense sensory inputs



# Types of Sensory Sensitivities: Hypersensitivity vs. Hyposensitivity


- Hypersensitivity (over-responsiveness): Autistic individuals may find everyday stimuli, such as lights or sounds, intolerably intense, leading to avoidance or distress.
- Hyposensitivity (under-responsiveness): In contrast, some individuals may not react to typical stimuli and may actively seek strong sensations, like pressure or fast movement, to achieve sensory satisfaction



# Sensory Challenges Related to Touch, Sound, Light, Smell, Taste, and Movement

➤ Autistic individuals can experience sensitivity in various sensory domains:

- Touch: Avoidance of certain textures or intense need for physical pressure.
- Sound: Aversion to sudden or loud noises; some may even hear sounds others don't.
- Light: Bright lights can be overwhelming; some may avoid eye contact or prefer dim lighting.
- Smell and Taste: Strong reactions to specific odors or flavors, leading to restricted diets.
- Movement: A need for constant motion or sensitivity to balance and proprioception, affecting coordination



# **The Impact of Sensory Overload on Behavior and Communication**


- Sensory overload can lead to behaviors like meltdowns or shutdowns, impacting communication and social interactions.
- Autistic individuals may struggle to filter sensory information, causing distress and, in turn, behavioral responses as a coping mechanism





# Recognizing and Responding to Sensory Needs



- **Recognizing Signs:** Signs of sensory discomfort include covering ears, avoiding eye contact, or self-stimulatory behaviors like rocking.
  - **Link to Behavior:** Sensory sensitivities often correlate with behaviors such as meltdowns, which may be mistaken for intentional misbehavior rather than a response to sensory discomfort
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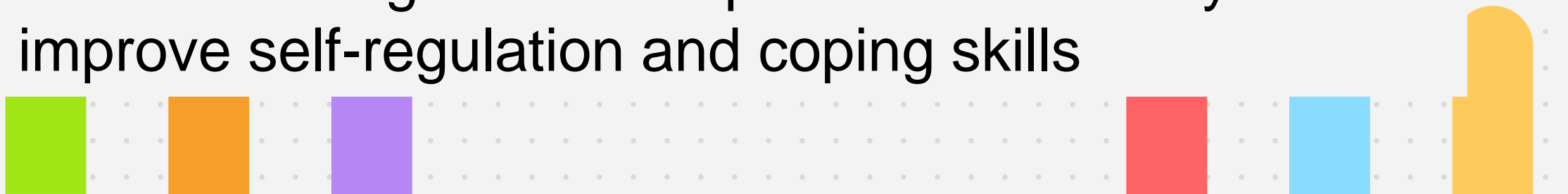
# Creating Sensory-Friendly Environments

- **Sensory Tools:** Using items like noise-canceling headphones, weighted blankets, and fidget toys can help manage sensory sensitivities.
- **Environment Adjustments:** Modifying lighting, minimizing background noise, and offering sensory breaks can reduce discomfort in homes, schools, and public spaces



# Supporting Sensory Regulation

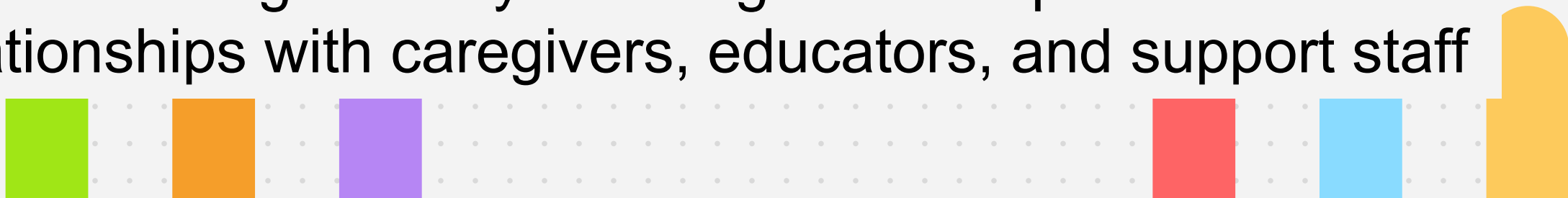


- **Sensory Breaks and “Sensory Diets”:** Planned sensory activities can help manage sensitivities, allowing breaks or specific activities that provide sensory input.
  - **Encouraging Self-Advocacy:** Teaching autistic individuals to recognize and express their sensory needs can improve self-regulation and coping skills
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# Collaborating with Autistic Individuals



- **Personalized Strategies:** Working with autistic individuals to identify sensory preferences can foster effective support strategies.
  - **Empathy and Sensitivity:** Building trust through understanding sensory challenges can improve relationships with caregivers, educators, and support staff
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# List of sensory toys and tools designed to support sensitivities across various senses:

## 1. Light Sensitivity

- Light-Diffusing Tents or Canopies: Create a shaded area that reduces light intensity.
- Color-Changing or Adjustable Light Boxes: Allows control over brightness and color intensity.
- Glow-in-the-Dark or LED Sensory Toys: Gentle, adjustable lighting that provides calming visual stimulation.
- Projection Lamps or Star Projectors: Create soothing visuals without harsh light.
- Sunglasses or Visors: For individuals who need to filter or dim environmental lighting.

## 2. Sound Sensitivity

- Noise-Canceling Headphones: Block out background noise to reduce sensory overload.
  - White Noise or Calming Sound Machines: Provide consistent sound that masks sudden noises.
  - Musical Toys with Adjustable Volume: Allow control over sound level.
  - WhisperPhone: A sound-amplifying toy that focuses on spoken words, great for auditory processing without excess noise.
  - Soft, Squeezable Ear Plugs: Useful for blocking out overwhelming noise during activities.
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## List of sensory toys and tools designed to support sensitivities across various senses (contd):

### 3. Touch Sensitivity

- Weighted Blankets or Lap Pads: Offer deep pressure for calming tactile feedback.
- Therapy Putty or Stress Balls: Great for providing hand pressure without unexpected tactile stimuli.
- Soft Fleece or Silk Sensory Blankets: Offer comfort with gentle, soothing textures.
- Sensory Brushes: Help with desensitizing skin through controlled, gentle tactile input.
- Fidget Spinners and Fidget Cubes: Engage the hands without causing unwanted textures.

### 4. Smell Sensitivity

- Aromatherapy Diffuser with Adjustable Settings: Allows gentle introduction to scents in a controlled manner.
  - Scented Dough or Putty: Provides a tactile and olfactory experience, with mild scents.
  - Unscented Modeling Clay or Dough: For individuals who prefer scent-free tactile play.
  - Scratch-and-Sniff Books or Cards: Controlled exposure to mild, non-overwhelming scents.
  - Aromatherapy Inhalers: Compact tools for carrying specific, calming scents.
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## List of sensory toys and tools designed to support sensitivities across various senses (contd):

### 5. Taste Sensitivity

- Chewable Necklaces or Chewy Tubes: Provide oral sensory feedback without introducing flavors.
- Flavor-Free Oral Motor Tools: Offer oral input without taste, useful for tactile input in the mouth.
- Mini Vibrating Oral Massagers: For stimulating oral muscles, especially helpful for hypo-sensitivity.
- Edible Play Dough (Taste-Safe): Allows for safe tasting and exploration with familiar flavors.
- Flavored Straws or Spoon Tips: Add a gentle flavor to drinks or foods in a controlled way.

### 6. Movement Sensitivity (Vestibular and Proprioceptive)

- Therapy Swings (Hammock or Pod Style): Offer gentle rocking or spinning, providing vestibular input.
  - Balance Boards or Wobble Cushions: Engage movement while sitting, helping with balance and core strength.
  - Trampolines or Bouncy Balls: For sensory seekers who benefit from jumping and bouncing.
  - Body Socks: Provide resistance and proprioceptive input to promote body awareness.
  - Weighted Vests: Offer deep pressure to help with grounding and proprioceptive input.
  - These sensory tools and toys can be tailored to individual needs and can help support a calming and regulated sensory experience.
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# Conclusion

- Summary of key points
- Closing message



# Thank you!

Do you have any questions?



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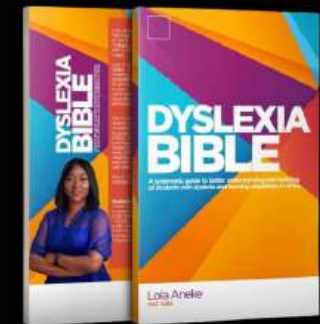
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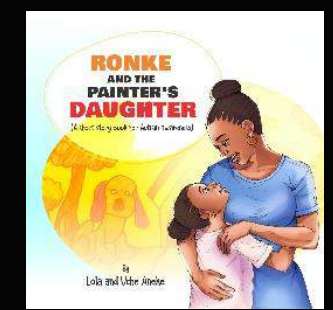
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