

Sensory Processing



Overview



- To explore the way sensory processing may be different for children on the autism spectrum
- To identify and support the sensory preferences of your child



Introduction





Key Resource: Sensory Issues in Autism (East Sussex Council) [sensory issues in autism.indd \(windows.net\)](#)

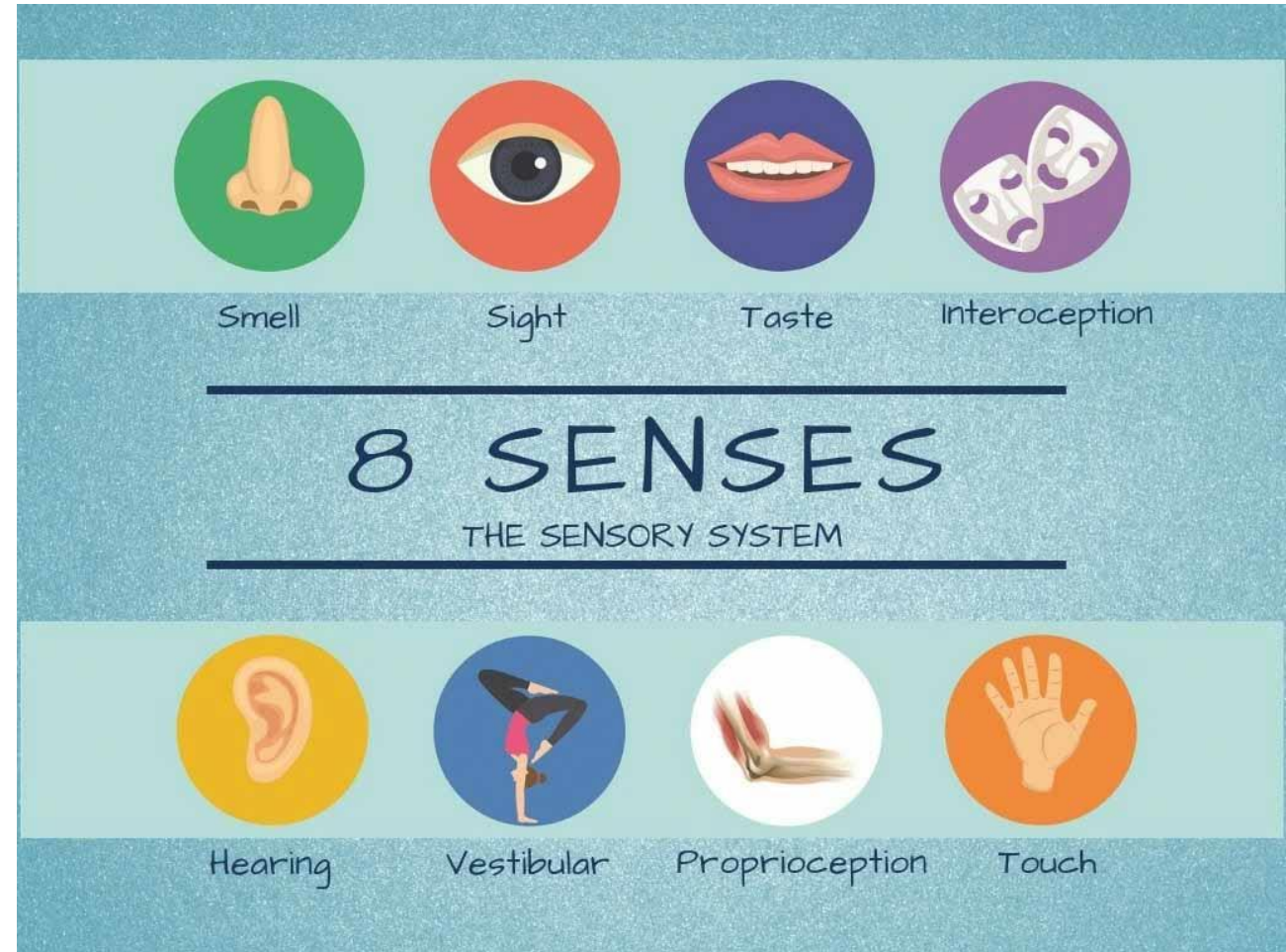
Sensory Processing

- Sensory processing is the ability to feel, understand, change and respond, both physically and emotionally, to sensory input from our bodies and the environment.
- It allows us to respond to the sensory input in a meaningful and appropriate way and make an appropriate response to meet the demands of the environment.
- For the most part having different sensory preferences doesn't make a big difference to our life or our ability to learn, work, play and carry out everyday tasks.



Sensory Processing

- We have eight sensory processing systems, tactile (touch), visual (sight), auditory (hearing), gustatory (taste), olfactory (smell), vestibular (balance), proprioceptive (body awareness) and interoceptive (sense of bodies internal state).
- Children on the autism spectrum may have difference in the way they process sensory information across all these systems.



Differences in sensory processing



Differences in Sensory processing

Differences can include:

- High (hyper) or low (hypo) sensitivity in relation to the eight senses.
- Being under-sensitive and/or not responding to pain, hunger, thirst or need for the toilet.
- Having difficulty filtering out irrelevant sensory information.
- Reduced body awareness and difficulty coordinating themselves.



[The Sensational Thinking Project Final 1 - YouTube](#)



**What is the impact of
these differences?**



Impact

Sensory Overload

- Autistic people have described this as being like a traffic jam in your head, with conflicting signals coming from all directions. This can make it difficult to make sense of it all.
- Sensory overload can be physically painful and very frightening. It can lead to high levels of stress and anxiety, and sometimes to distressed behaviours and a strong need to remove themselves from the situation to help themselves feel safe.



[Autism and sensory sensitivity \(youtube.com\)](https://www.youtube.com/watch?v=...)





Impact

Safety

Differences in sensory processing can have associated risks with them and make it difficult for children to learn how to keep themselves safe. For example, children on the autism spectrum:

- Might have a dangerously high tolerance for pain.
- Might be under-sensitive to taste, and therefore like eating highly flavoured foods or inedible items and substances.
- Might be under-sensitive to noise and find it difficult to process certain sounds such as a nearing car.
- May seek sensory input through dangerous physical activities.



Sensory Preferences

Think about your own child

- What are their sensory preferences?
- What sensory situations do they find most challenging?

We will share this with the group



Strategies to support Sensory Processing



Strategies

Sensory Preference Profile

This can be done by school staff, parents and the child themselves. This will help to identify areas of strength and challenge. Reasonable adjustments to the environment based on the needs of the individual child can then be made.

Environmental Checklist

This can help staff to create an environment that enables the participation of autistic children. It gives ideas on the ways a school might be altered if children find it hard or very anxiety-provoking to tolerate certain sensations or situations.



Sensory Differences and Preferences

To fully understand a child's sensory needs and to safely implement effective strategies to optimise a child's learning and health outcomes, a comprehensive sensory assessment and report should be completed by an appropriately trained health professional e.g. an Occupational Therapist.

If a sensory assessment has been carried out by a trained health professional, please refer to this when filling out the table below.

Child's name: _____

Calm (Down)	
Hypo sensitivities:	
Strategies:	
Hyper sensitivities:	
Strategies:	

Autism Education Trust



Visual (Light)	
Hypo sensitivities:	
Strategies:	
Hyper sensitivities:	
Strategies:	

Auditory (Hearing)	
Hypo sensitivities:	
Strategies:	
Hyper sensitivities:	
Strategies:	

Autism Education Trust




Strategies

System	Over Sensitive	Under Sensitive	Reasonable Adjustments
<p>Touch</p> 	<ul style="list-style-type: none"> • Touch can be painful and uncomfortable, and some children may withdraw from aspects of touch. • Only tolerates certain materials for clothing • Dislike of having anything on hands or feet 	<ul style="list-style-type: none"> • Holds others tightly • Has high pain threshold (pain/temperature) • Self harming • Enjoys heavy objects on top of them • Prefers tight clothing 	<p>Consider:</p> <ul style="list-style-type: none"> • School Uniform • Seating plan • Group Activities • Leave class early or late • Curriculum activities e.g., PE, Art, or DT • Non-curricular activities e.g., assembly, dining hall, transitions between lessons, school arrival or leaving times • Personal space guidance • Fiddle object




Strategies

System	Over Sensitive	Under Sensitive	Reasonable Adjustments
<p>Sight</p> 	<p>Distorted vision occurs, objects and bright lights can jump around</p> <ul style="list-style-type: none"> • Fragmentation of images, because of too many sources of visual stimuli • Focussing on details (sand grains) can be more pleasurable than looking at something as a whole • Distracted by certain lighting 	<ul style="list-style-type: none"> • May see things darker, lose features and lines • May concentrate on peripheral vision as central vision is blurred • Conversely, a main object is magnified and things on the periphery are blurred • Poor depth perceptions – problems with catching or throwing • Flapping near eyes 	<p>Consider:</p> <ul style="list-style-type: none"> Lighting Blackout blind Seating Plan Class displays Sunglasses Workstation Use of ICT e.g., laptop rather than whiteboard




Strategies

System	Over Sensitive	Under Sensitive	Reasonable Adjustments
<p>Hearing</p> 	<ul style="list-style-type: none"> • Volume of noise can be magnified, and surrounding sounds distorted and muddled • Inability to cut out sounds – difficulties concentrating • Lower hearing threshold and sensitive to auditory stimuli – hearing distant conversations • Fingers in ears 	<ul style="list-style-type: none"> • May not acknowledge sounds • Enjoys crowded noisy places • Bangs doors and objects • Makes own noise e.g., humming 	<p>Consider:</p> <ul style="list-style-type: none"> • Ear defenders/plugs • Calming music • Curriculum activities e.g., Music, PE, DT. • Non-curricular activities e.g., assembly, dining hall, transitions between lessons, school arrival or leaving times, Fire Alarm practice, hand dryers/paper towels in toilets • Increased processing time for verbal instructions • Simplify, repeat and reinforce verbal language • Use of visual Supports




Strategies

System	Over Sensitive	Under Sensitive	Reasonable Adjustments
<p>Smell</p> 	<ul style="list-style-type: none"> • Aversion to smells • Smells can be intensified and overpowering • Toileting problems • Dislike of individuals with distinctive perfumes or shampoos 	<ul style="list-style-type: none"> • Smells objects • May have no sense of smell and fail to notice extreme odours • May lick objects 	<p>Consider:</p> <ul style="list-style-type: none"> • Curriculum activities e.g., DT (cooking), Science, PE or Art • Non-curricular activities e.g., dining hall, toilets or playground • Perfume, deodorant and shampoo • Room ventilation • Seating Plan • Group Activities



Strategies

System	Over Sensitive	Under Sensitive	Reasonable Adjustments
<p>Taste</p> 	<ul style="list-style-type: none"> • Some flavours and foods are too strong and overpowering • Certain textures also cause discomfort; some children will only eat smooth foods such as mashed potatoes or ice cream • Only eats bland foods 	<ul style="list-style-type: none"> • Preference for strong flavours – like very spicy foods • Eats everything e.g., grass, soil, materials 	<p>Consider:</p> <ul style="list-style-type: none"> • School dinner/packed lunch options • Curriculum activities e.g., DT (cooking) or Science



Interoception

What helps?

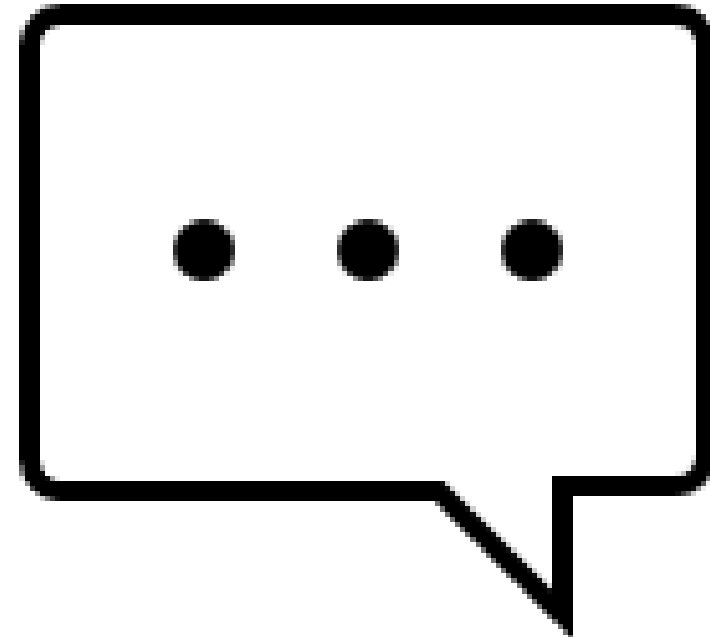
- Explicitly teaching to notice sensations and teach meaning.
- Systems to support, e.g. timers, routines such as always going to the toilet before going out/an hour after drinking.
- Visual supports around routines.
- Try technology and wearables



Sensory Processing

Key Messages

- Autistic children may have high (hyper) or low (hypo) sensitivity in relation to the eight senses and can have difficulty filtering out irrelevant sensory information.
- Sensory overload can be highly distressing and disabling for autistic children. Recognise your child's sensory preferences and adjust their environment to take account of these.



Useful Resources and websites:

General advice on sensory strategies

Middletown Centre for Autism

<http://sensory-processing.middletownautism.com/sensory-strategies/>

National Autistic Society

<https://www.autism.org.uk/sensory>

Oxfordshire NHS Occupational Therapy

<https://www.oxfordhealth.nhs.uk/childrens-occupational-therapy/resources/>

Key Resource: Sensory Issues in Autism (East Sussex Council)

[sensory issues in autism.indd \(windows.net\)](sensory issues in autism.indd (windows.net))



Books

Raising a Sensory Smart Child. The definitive Handbook for Helping Your Child with Sensory Processing issues by Lindsey Biel and Nancy Peske (Penguin)

The Sensory World of The Autistic Spectrum: A Greater Understanding by Kate Williams (NAS)

Sensational Kids Hope and help for Children with Sensory Processing Disorder by Lucy Jane Miller (Penguin)

Understanding Sensory Dysfunction by Polly Godwin Emmons And Liz McKendry Anderson (JKP)

Squirmy Wormy How I Learned to Help Myself by Lynda Farrington –Wilson

The Out of Sync Child and The Out of Sync Child has Fun (Practical strategies) by Carol Stock Kranowitz (Penguin)



Emotional Wellbeing



Overview



- To understand why anxiety may be challenging for children on the autism spectrum
- To identify strategies to support the emotional wellbeing of your child



Introduction





Emotional Wellbeing

- Emotional wellbeing is important for all children. They will benefit from support to develop an awareness of self by recognising their strengths and needs, likes and dislikes, emotions and feelings.
- If this support is at the correct developmental level, it can help autistic children to feel calm, manage their anxiety and build their resilience.



Anxiety

- Evolutionary necessity for survival
- Fight, flight or freeze response to perceived danger

"Anxiety is what we feel when we are worried, tense or afraid – particularly about things that are about to happen, or which we think could happen in the future. Anxiety is a natural human response when we perceive that we are under threat. It can be experienced through our thoughts, feelings and physical sensations." Mind 2017



Anxiety



- Anxiety becomes problematic when it impacts on everyday life and gets in the way of the person's everyday functioning, seems disproportionate to the situation or continues for a long time.
- We know that people with autism experience anxiety more than the general population. A recent study, Kerns et al. (2020), identified anxiety at a rate of 52% in autistic children, compared to a rate of 8% in non-autistic children.



What are the causes of anxiety for children on the autism spectrum?





[Anxiety in autism explained. #AnxietyBreakthroughs - YouTube](#)

Causes of Anxiety

Sensory Processing

- Finding it difficult to use sensory information to understand and make predictions about their environment
- Too much sensory input leading to becoming overloaded

Alexithymia

- Significant challenges in recognising, expressing and describing your own emotions.

Social Situations

- Challenges with understanding e.g., expectations
- Not being able to express themselves (need means and opportunity)
- Not understanding the behaviours of others e.g., they are unpredictable
- Not understanding the expectations or rules around social interactions

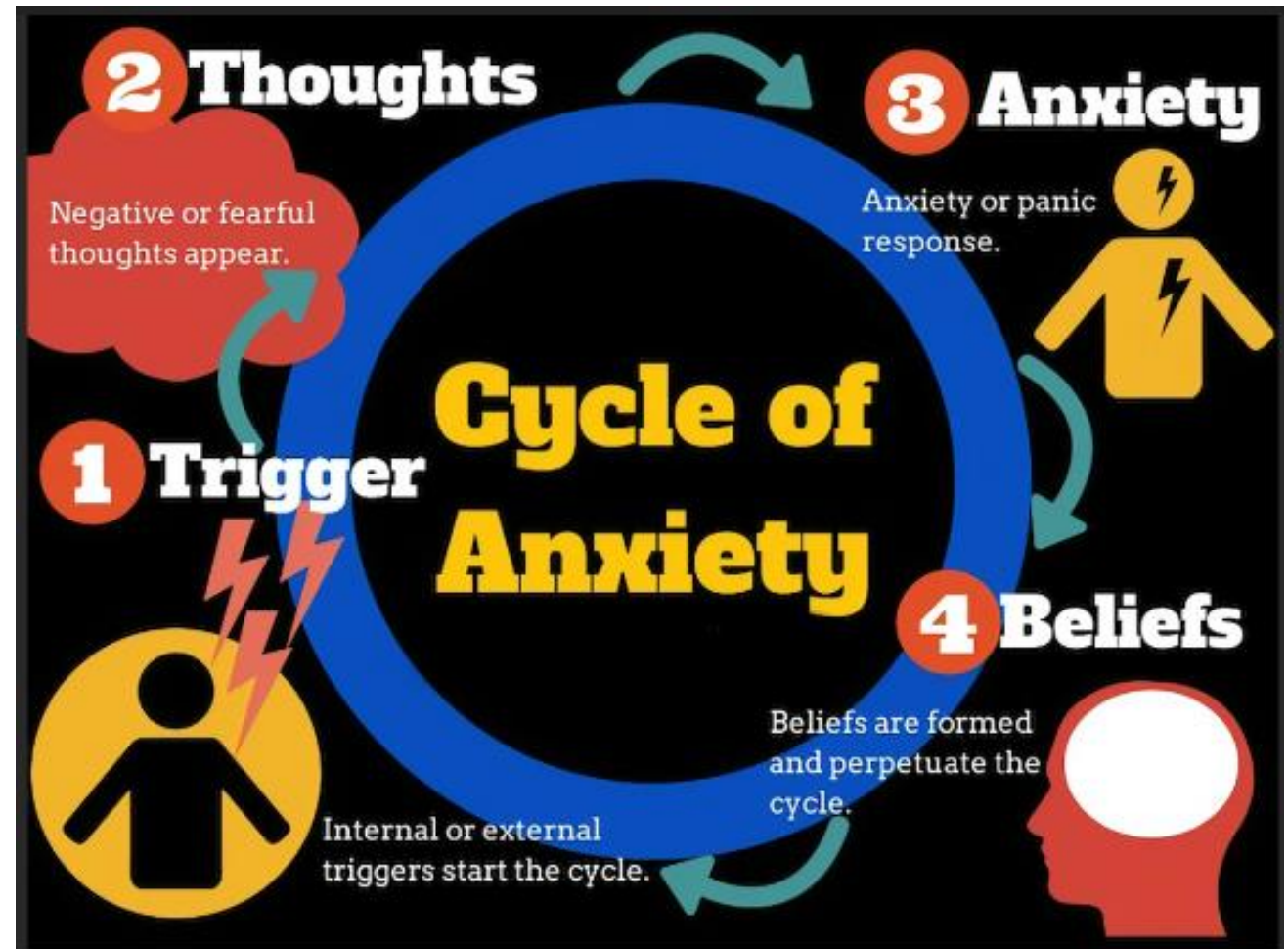
Uncertainty

- Finding transitions, change to routines and new experiences difficult to understand, visualise and manage e.g., going on holiday to a different place
- Finding it challenging to problem solve, look at things differently or find a different way of doing things



Cycle of Anxiety

1. **Trigger** – leads to negative thoughts.
2. **Thoughts** – leads to anxiety. Fixating on thoughts and becoming ‘stuck’ in the negative emotion associated with them.
3. **Anxiety** – leads to the instinctive need to avoid and escape danger (real or imaginary) through fight, flight, freeze and avoidance behaviours.
4. **Beliefs** – leads to a loss of confidence in the ability to cope. The next time they face a fear that they averted, it will feel scarier, leading to increased anxiety and a reduced threshold for managing triggers.



What does anxiety look like for children on the autism spectrum?





What does anxiety look like?

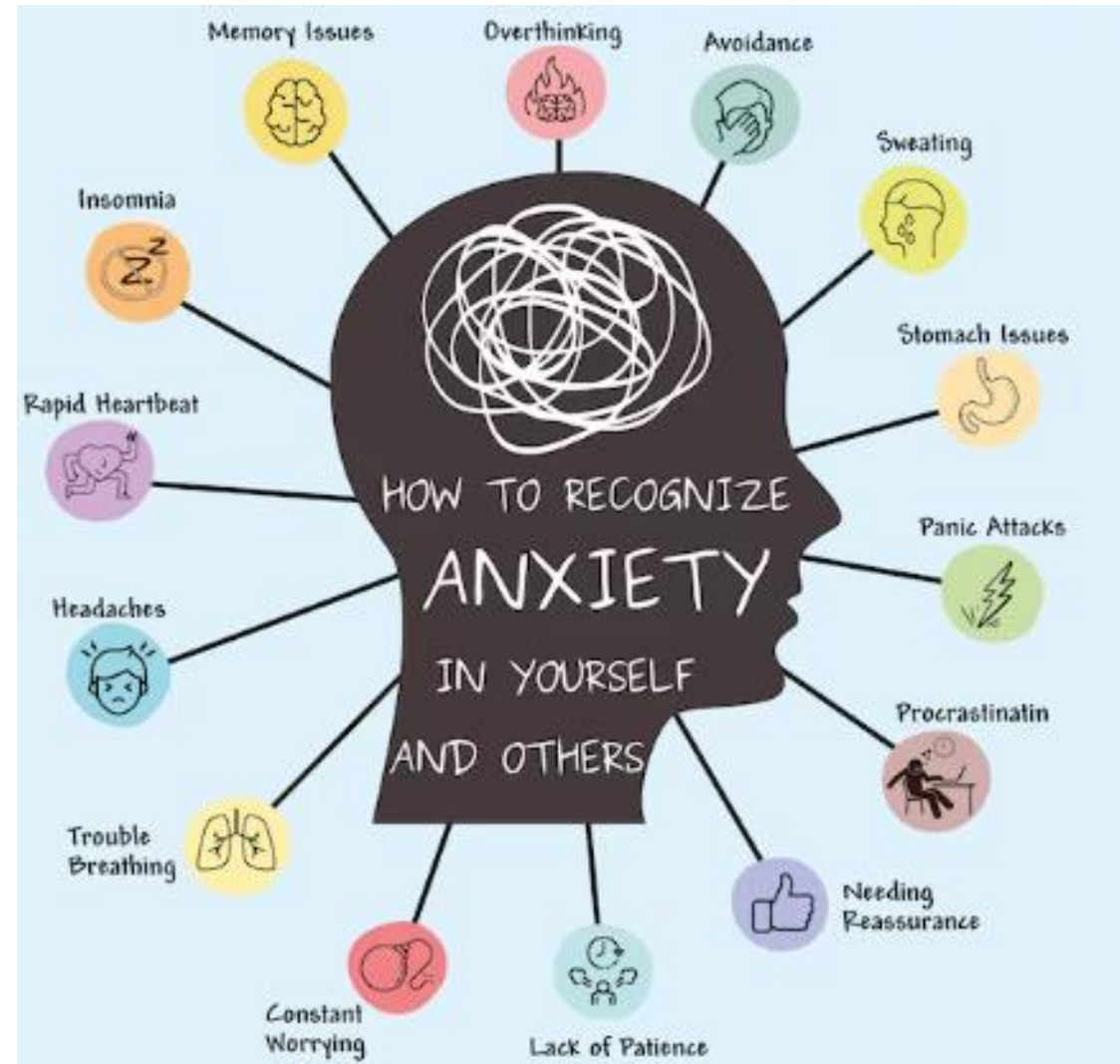
- Anxiety can manifest itself in a variety of observable behaviours, as well as internal experiences that will vary by developmental stage.
- These include physical and emotional responses that may not immediately seem linked to anxiety.

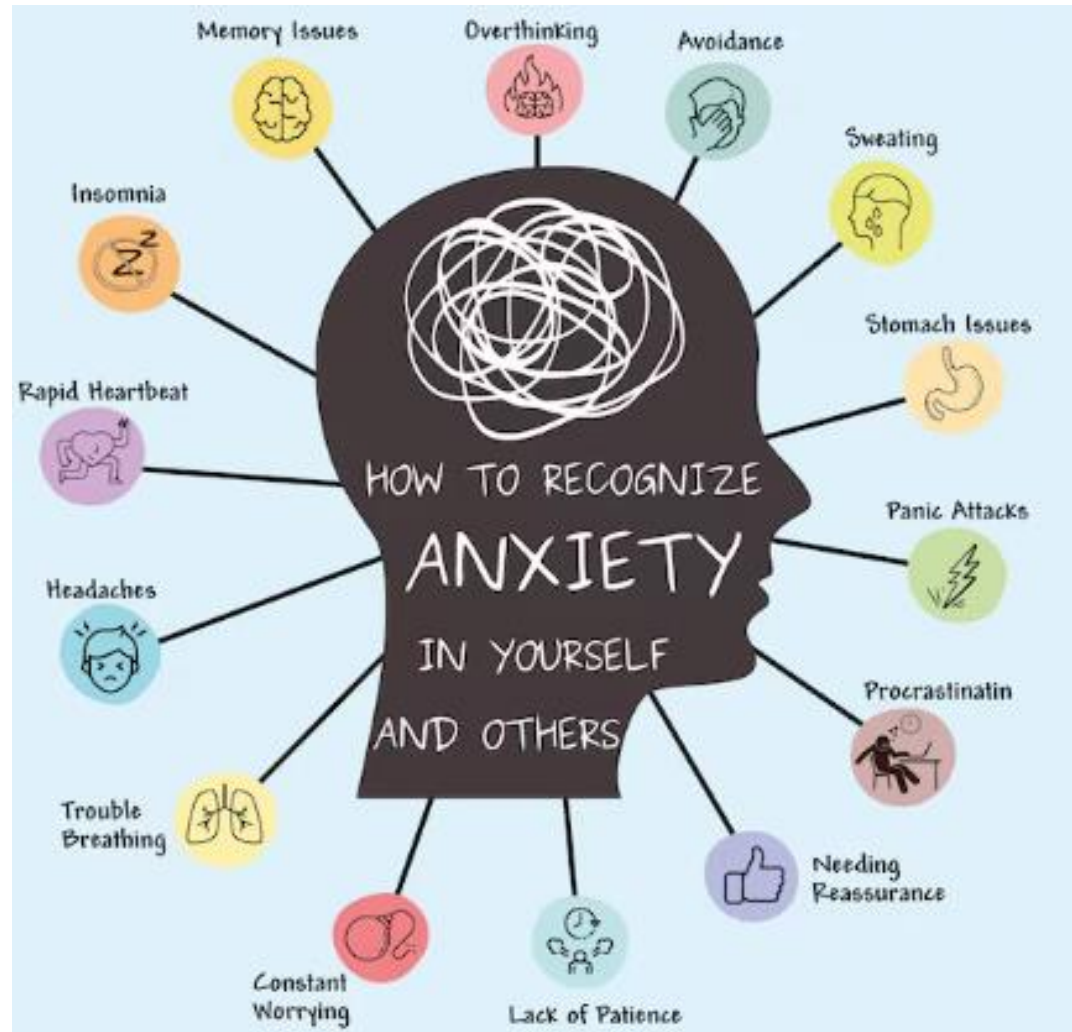


What does anxiety look like?

Physical Responses

- Feeling tired and grumpy
- Heart beating fast
- Having a dry mouth
- Trembling
- Feeling faint and/or dizziness
- Stomach cramps and/or diarrhoea
- needing to go to toilet more than usual
- Muscle tension/tremors
- Experiencing 'pins and needles'





What does anxiety look like?

Emotional responses

- Feeling nervous or panicky all the time and excessively
- Feeling overwhelmed, or full of dread
- Feeling out of control
- Experiencing uncontrollable worry
- Having trouble sleeping
- Low appetite
- Finding it difficult to concentrate
- Avoidance
- Impatience
- Catastrophising
- Preoccupation/obsession with a topic





Anxiety

Think about your own child

- Do you know what causes them anxiety?
- How does this present?
- Is this the same at home, in school or the community?

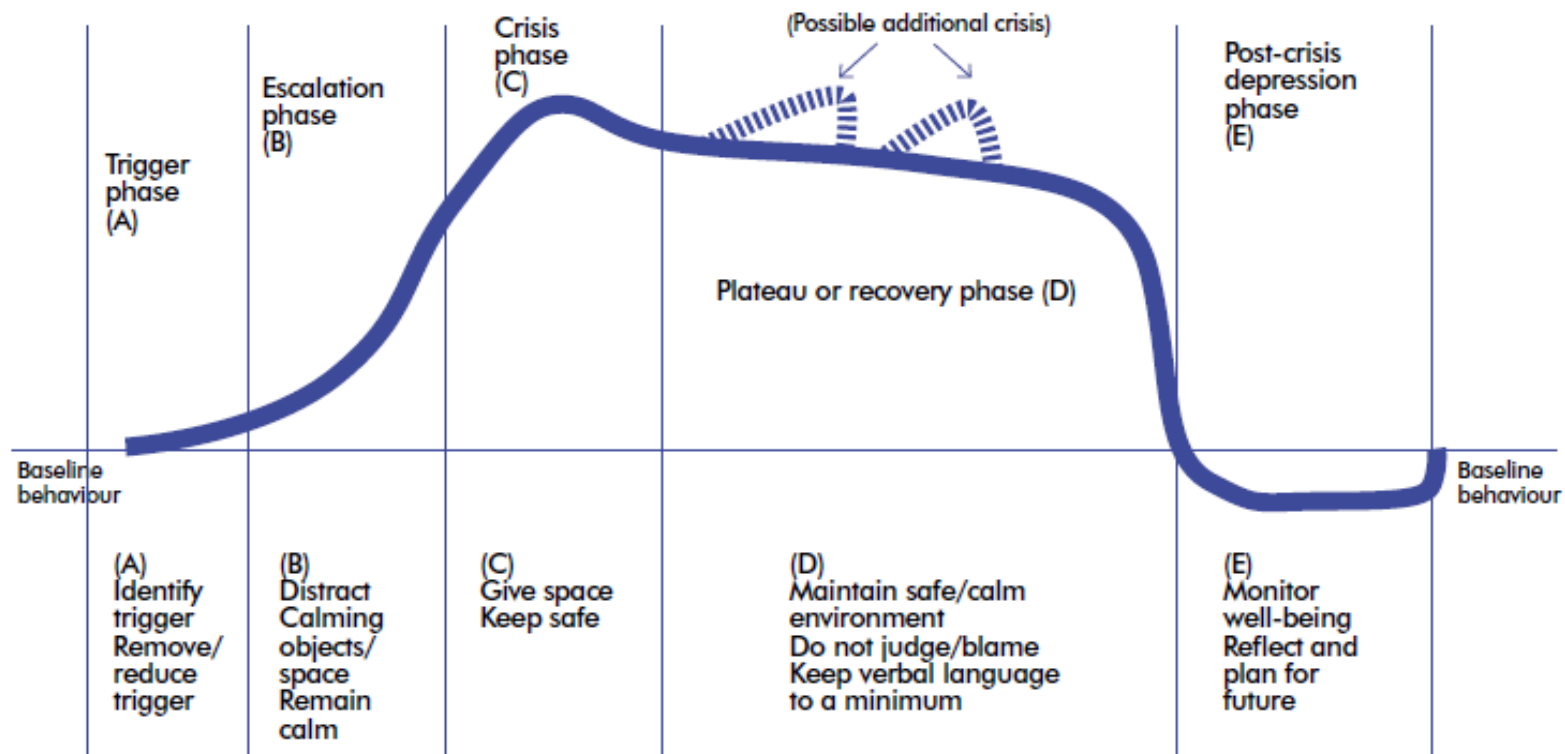
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Strategies to reduce and manage anxiety

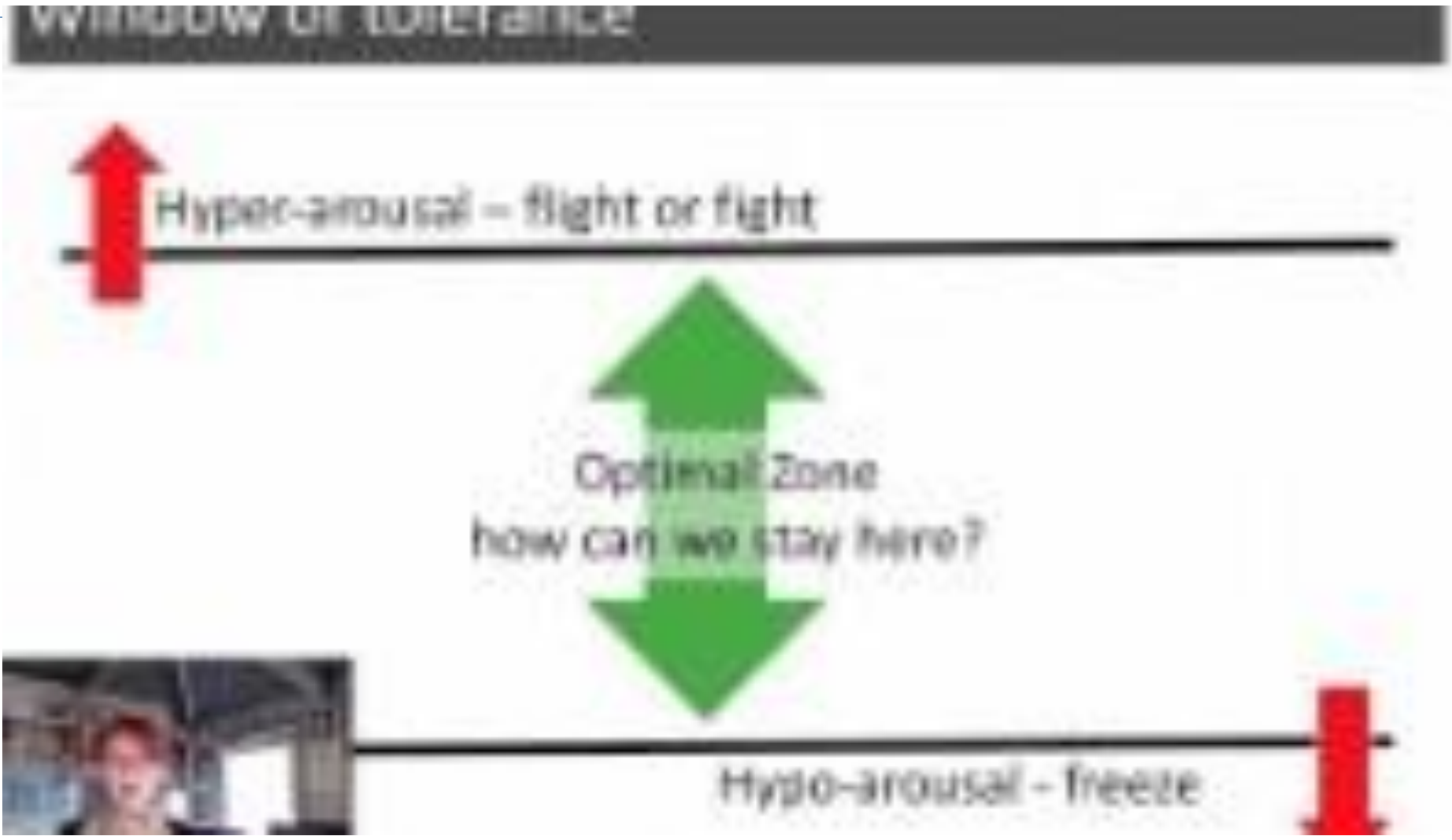


Understanding the effects of arousal



Autistic children may respond to anxiety through physical or verbal outbursts, withdrawal, refusal to cooperate or repetitive actions. These behaviours often communicate the intense distress and discomfort the child is experiencing.





Strategies

Trigger/Escalation Phase

You can help by:

- Identifying and removing/reducing triggers
- Providing routine, predictability, and consistency
- Have a box of calming items (see video)
- Having a low-stimulus sensory/safe space
- Providing frequent opportunities for exercise and movement breaks



[How to make a self-soothe box - YouTube](#)





[ANXIETY | Top phrases for calming anxious children - YouTube](#)

Strategies

Escalation/Crisis/Post Crisis Phase

To de-escalate if your child displays distressed behaviours, you can try the following strategies:

- Go to a quiet area.
- Provide a calming activity or objects.
- Remain calm – both language and body language.
- Be gentle and patient – have a neutral and steady tone of voice.
- Limit your communication.
- Remove physical or sensory discomfort.



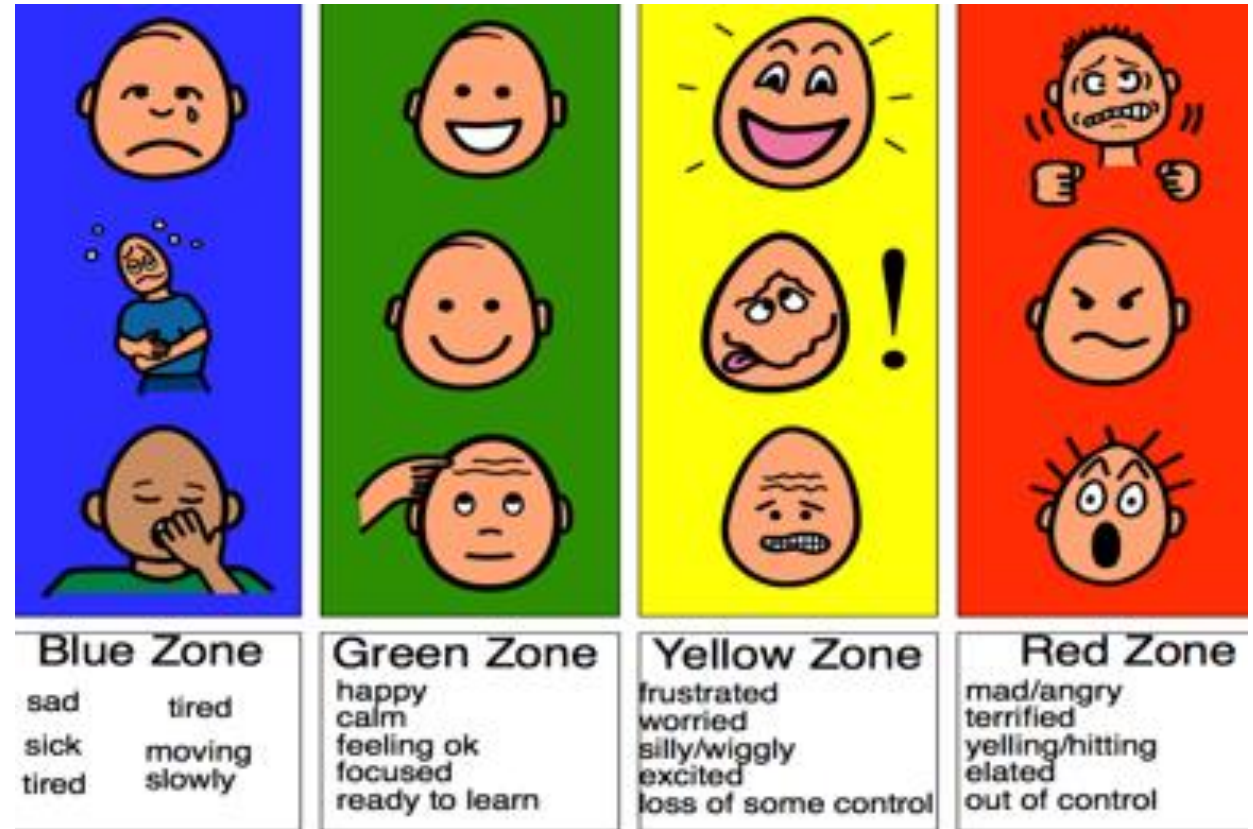
Strategies

Baseline Phase

The Zones of Regulation

This framework categorises emotions and states of alertness into four colour-coded zones, each representing a different level of emotional intensity and self-regulation. It can be used to teach children:

- A vocabulary of emotional terms
- How to recognise and regulate their own emotions and energy levels
- Problem solving skills



Maja Toudal

Energy Accounting



Too much energy out and not enough in is bad. It leads to overload, and exhaustion.



Balancing your energy using energy accounting is good. It leads to feeling regulated, calm and happy.

Energy Accounting Activity Example

Withdrawal

- not sleeping (80)
- school (90)
- crowds (70)
- noise (80)
- brightness (50)
- shopping centers (50)
- swimming pools (80)
- hot days (50)
- rushing (70)
- pain (90)
- change (90)
- screens (50)
- sport (70)
- social events (80)
- busyness (60)
- appointments (70)

Deposit

- walking (20)
- reading (90)
- painting (30)
- origami (50)
- solitude (80)
- lisa (80)
- cat cuddles (20)
- cross-stitch (20)
- chosen noise (50)
- time with mum (50)
- rug rolling (10)
- miss Dani (20)
- accomplishing hard things (90)
- lego alone (50)
- noise-cancelling headphones (50)
- tactile play (50)









<https://www.bbc.co.uk/programmes/p05k8jzb>

Proactive Supports

1. Clear expectations - Use clear, concise language and 'do's' rather than 'don'ts'
2. Structure - Provide visual supports to support predictability
3. Transitions/Change - Reduce and plan for these
4. Reduce/Remove unwanted stimuli- Be aware of sensory and social challenges
5. Calming activities/space - Have a safe space and activities/objects your child can access that they enjoy
6. Energy levels - Consider if your child is hungry, tired or needs physical activity
7. Positive reinforcement - Give feedback and encouragement on positive behaviours and consider reward/motivations
8. Promote positive activities - Engage with your child's interests and in activities they enjoy and make them happy



The **ZONES** of Regulation®

			
BLUE ZONE Sad Sick Tired Bored Moving Slowly	GREEN ZONE Happy Calm Feeling Okay Focused Ready to Learn	YELLOW ZONE Frustrated Worried Silly/Wiggly Excited Loss of Some Control	RED ZONE Mad/Angry Mean Terrified Yelling/Hitting Out of Control

What are The Zones of Regulation?

A programme using a cognitive behavioural approach to teach self-regulation strategies through categorising all the different ways we feel into four clear and concrete-coloured zones. It can be used to teach children:

- Vocabulary of emotional terms
- How to recognise their own emotions
- How to detect the emotions of others (read others' facial expressions)
- What may trigger certain emotions
- How others may interpret their behaviour
- Problem solving skills

Key Strategy: Zones of Regulation





Your Wellbeing

It is important to think about your own wellbeing and that of your family, including siblings.

Advice can be found at:

[Looking after yourself as a parent or carer | Autism Central](#)

[Family relationships - a guide for siblings of autistic people \(autism.org.uk\)](#)

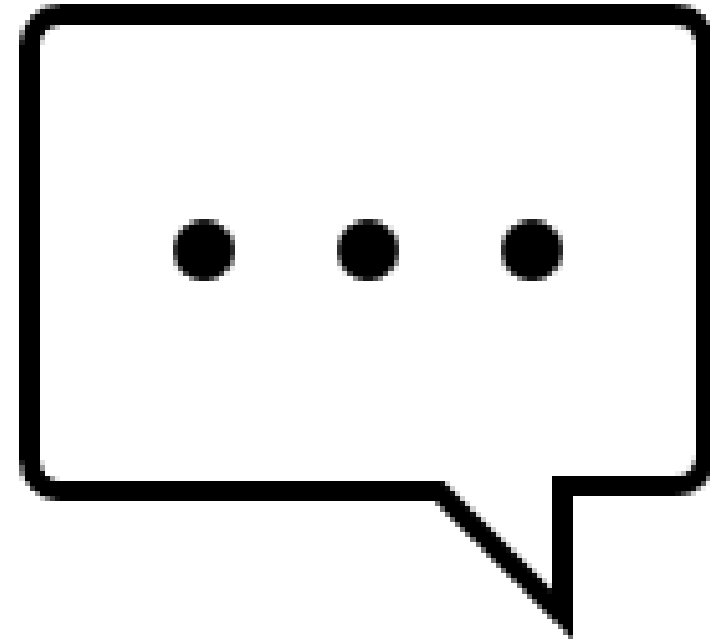
[Home – Sibs](#)



Emotional Wellbeing

Key Messages

- Each child's anxiety has different triggers, which we must learn about before planning support.
- The aim is to get anxiety to a level where it is manageable and to ensure that children are ultimately equipped to do this alone.
- Try to work together to ensure there is agreement on the toolbox of approaches you, your child and school have, to reduce and manage anxiety.



The idea behind the Worry Eater/Worry Monster, is that children write down or draw a picture of what's upsetting them and put it into the toy's mouth, which is then zipped shut — banishing their worries.

The Worry Monster teddies are available to buy online; however, you could also make your own Monster Box at home!



Key Strategy: Worry Monster





Useful Resources and websites:

Mental health and wellbeing

<https://youngminds.org.uk/find-help/for-parents/>

Oxfordshire CAMHS

<https://www.oxfordhealth.nhs.uk/camhs/oxon/>

Key Resource: An evidence-based guide to anxiety in autism

<https://www.oxfordshire.gov.uk/sites/default/files/file/special-educational-needs/anxiety-in-autism-a5-guide.pdf>

Key Strategy: Zones of Regulation

<http://www.zonesofregulation.com/index.html>

Key Strategy: Worry Monster

Use this link to create your own paper worry monster:

<https://www.elsa-support.co.uk/wp-content/uploads/Worry-Monster-Craftivity.pdf> .

Use this link to design your own worry monster:

<https://www.elsa-support.co.uk/wp-content/uploads/2020/04/Design-a-worry-monster.pdf>



Useful Resources and websites:

Mindfulness Apps

Breathing Bubbles is an app that helps children practice releasing worries and focusing on good feelings by allowing them to select the emotion they are feeling and how strongly they are feeling it.

Stop, Breathe & Think Kids offers children a fun and easy way to identify and process their emotions. From counting breaths to friendly wishes or frog jumps, each activity brings fun rewards to keep them engaged.

Smiling Mind is designed to help people pressure, stress, and challenges of daily life. This app has a fantastic section on Mindfulness in the Classroom and is suited for children ages 7-18

Breathe, Think, Do with Sesame is intended for parents and caregivers to use with their young children (ages 2-5) to help teach skills such as problem-solving, self-control, planning, and task persistence.

Dreamy Kid meditation app offers meditation, guided visualisation and affirmations curated just for children & teens. It uses proven techniques that teach your kids methods to guide them towards a happier life through mindfulness.



Muscle Relaxation, Calming Scripts and Guided Meditation

Use these YouTube links for videos on complete muscle relaxation

- <https://www.youtube.com/watch?v=aaTDNYjk-Gw> Progressive Muscle Relaxation for Adults and Kids
<https://www.youtube.com/watch?v=cDKyRpW-Yuc> Progressive Muscle Relaxation for Kids
<https://www.youtube.com/watch?v=RAbs4pyjLNg> Muscle Relaxation for Kids

Scripts:

[Happy Heart Meditation](#)

[Lakeside Meditation](#)

[Peaceful Butterfly - night time relaxation script](#)

YouTube – Guided Relaxation Scripts:

- <https://www.youtube.com/watch?v=mZO-R7iuCNo> Letting Go Of Worries
<https://www.youtube.com/watch?v=aX9PUQcdQ2U> Guided Meditation for Anxiety and Worries
<https://www.youtube.com/watch?v=ZBnPlqQFPKs> Balloon Breathing Guided Meditation



Books

The Very Hungry Worry Monsters by Lara Ede

<https://www.youtube.com/watch?v=DzmvjAjHafM> listen to the book being read aloud here.

Ruby's Worry by Tom Percival

<https://www.youtube.com/watch?v=VCyiiHI2SJU> listen to the book being read aloud here.

The Huge Bag of Worries by Virginia Ironside

<https://www.youtube.com/watch?v=CDrnuPj7xfS> – listen to the book being read aloud here.

Jack's Worry by Sam Zuppardi

<https://www.youtube.com/watch?v=TQ0wyzjr5mg> – listen to the book being read aloud here.

The Don't Worry Book By Todd Parr

<https://www.youtube.com/watch?v=0zpH3f1TMzM> – listen to the book being read aloud here.

Don't Worry Bear by Greg Foley

<https://www.youtube.com/watch?v=nOCUHWjKKFg> – listen to the book being read aloud here.

The Worry Box by Suzanne Cheiw

<https://www.youtube.com/watch?v=0-bVNviYn34> – skip to 1:05 to listen to the book being read aloud.



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SWiFT from SEN Support Services**

**Please scan this QR code to complete a quick survey
about your experience of the course.**

