# The Co-Occurrence of: ASD/ADHD

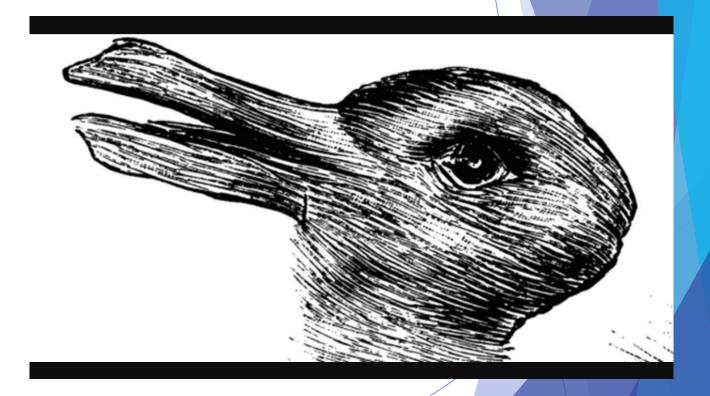
Dr Sonia Bailey
Senior Educational Psychologist
(Co-written with Dr Jennifer Garner, Senior EP)

## Outline of Training

- Neurodiversity
- ► Co-occurrence of neurodevelopmental conditions
- Recap ASD and ADHD
- Similarities ASD / ADHD
- Some strategies to share

## Neurodiversity





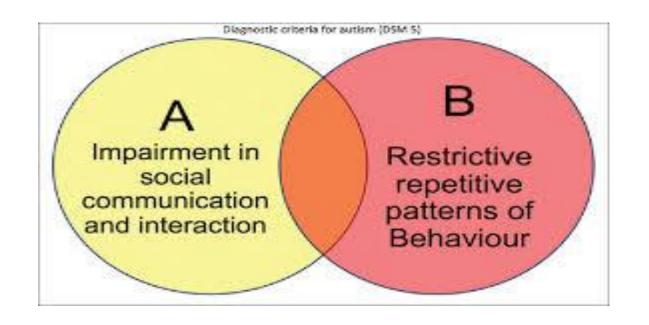
# Neurodiversity is the idea that it's normal and acceptable for people to have brains that function differently from one another.

'Today, we do not characterise Autism or ADHD in terms of deficit or impairment. But as a pattern of differences which present advantages and disadvantages to neurotypical social norms and expectations.'



Experiences of Autism with ADHD / ADHD with Autism

#### What is ASD?





- Must be present in early childhood (may not become fully apparent until social demands exceed limited capacities or may be masked)
- Difficulties have a significant impact on social, occupational and other important areas of daily life.
- Difficulties are not better explained by learning difficulties/global developmental delay.
   For a diagnosis of Autism, social communication should be below that expected for general developmental level.

Social communication and interaction Integration of verbal and non Back and forth verbal conversation communication Social communication/interaction verbal and non-verbal **Initiating** and sustaining interaction Understanding Literal and use of understanding gestures

## Restrictive, repetitive patterns of behaviour

Repetitive motor movements, use of objects or speech
Echolalia
Stimming
Saying words for affect
Repetitive questioning

Intense interests Unusual interest in details Repetitive patterns of behaviour

Sensory needs

Insistence on sameness:

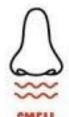
Persistent adherence to routines

rituals e.g. same food every day, same route to school

### **Sensory Needs**

"If I get sensory overload then I just shut down; you get what's known as fragmentation...it's weird, like being tuned into 40 TV channels."

Heightened sensitivity











#### Sensory seeking

(Under-sensitive reaction to sensory stimulation)

Can result in a Sensory Meltdown

- Different levels of sensitivity
- Can feel trapped

Touching things excessively
Turning the volume very loud
Constantly putting objects in his
or her mouth
Visual fascination with lights or
movement

## What is ADHD?

ADHD is an abbreviation for Attention Deficit Hyperactivity Disorder (ADHD) ADHD is a unique experience and a unique set of traits for each individual.

Adhd is split up in to 3 main presentations:

- · Hyperactivity-impulsive
  - · Inattentive type
  - Combined type

@Mollys\_ADHD\_mayhem

## ADHD is a neurodevelopmental disorder

#### Some of the Common traits of adhd:

- Poor concentration
- Disorganisation
- Impulsivity
- Hyperactivity
- Mood instability
- Emotional dsyregulation

Typical diagnosis around 7, 8, 9 years. Affects 0.9% girls and 3.6% boys between 5 and 15 years of age (NICE, 2013).

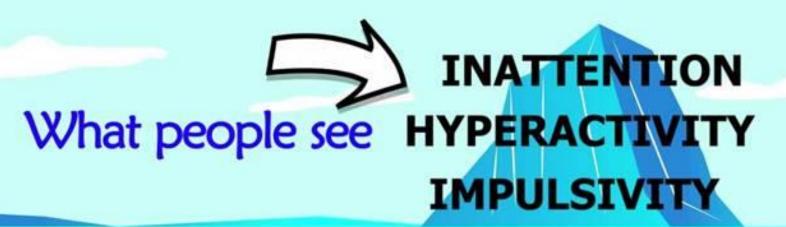
Approx 60% of children diagnosed in childhood have ADHD symptoms as adults.

41% had symptoms that created impairment.

The Journal of Child Psychology and Psychiatry, 2017 58(6)

#### Behaviour as Communication





ADHD

POOR WORKING MEMORY DIFFICULTY PLANNING & ORGANISING What MOOD SWINGS WORRY people don't see ANTICIPATION OF FAILURE REJECTION SENSITIVITY **EMOTIONALLY REACTIVE** LOW SELF ESTEEM SLEEP DISTURBANCE SENSORY ISSUES IMPAIRED SENSE OF TIME IMMATURITY

## Heritability

Autism has a strong genetic basis, although the <u>genetics</u> of autism are complex. Children with relatives in their family with Autism, are more likely to be on the spectrum themselves.

Heritability varies according to research study, but is thought to be above 50% (50% likelihood that an identical twin whose sibling is on the autism spectrum will also be).

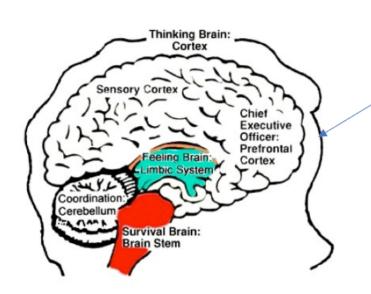
## ADHD is GENETIC:

- Brikell et al. (2019) reviewed longitudinal twin studies and found that stability in ADHD is largely due to **genetic** factors.
- Grimm et al. (2020) stated that the heritability of ADHD is about 80% and higher than most other psychiatric diseases.
- Hewitt (2020) stated that many of the relationships between ADHD and comorbid conditions are genetic in original
- Sudre et al. (2021) found significant heritability responsible for the neural changes implicated in ADHD.

twoemb.medium.com

#### **Executive Function**

Planning and organising thoughts, movements, actions or organise information to problem solve



#### **Executive Function Skills**

The Board of Directors that helps you do what you decide to do.

- Initiation/ Activation
- Planning and Organizing
- Attention
- Self-Monitoring
- Working Memory
- Effort
- Emotional Regulation

PTScoaching.com

Cindy Goldrich, Ed.M., ADHD-CCSP

#### Planning

Requires an understanding of the concept of change, adapting to those changes, the ability to make choices and implementing and revising a plan. Planning requires us to be flexible and aware that some things don't follow a linear format.

#### Cognitive flexibility

The ability to shift thoughts or actions according to the situation, i.e. your ability to adapt to a change.

A person with good cognitive flexibility is able to tolerate changes, i.e. tolerate alternative plans, move from one activity to the next, is able to see different points of views, and find different solutions to the same problem.

When you're making breakfast and run out of eggs, do you think of alternative things you could eat or make, or do you get angry and leave for school or work? Cognitive flexibility helps make alternative options when the original plan changes unexpectedly

Some children with autism spectrum show signs of perseveration (behaviour that is repetitive and continuous). Perseveration in autism is a result of poor mental flexibility. Examples of this are the inability to stop tasks, or continuously repeating the same patterns instead of considering other ways to do a task.

# **Key executive functioning skills for CYP with ADHD / ASD:**

- Impulse control / selfcontrol
- Working memory
- Cognitive flexibility / shifting / flexible thinking

### The 8 Executive Functions

#### Self-Control

The ability to stop and think before acting

#### **Emotional Control**

The ability to manage feelings to achieve goals and complete tasks

#### Task Initiation

The ability to start and finish tasks without procrastinating

#### Working Memory

The ability to use information held in memory to complete a task

#### Self-Monitor

The ability to view and evaluate oneself

#### Flexibility

The ability to adapt to changing conditions by revising plans or changing strategies

#### Organization

The ability to develop and use systems to keep track of materials and information

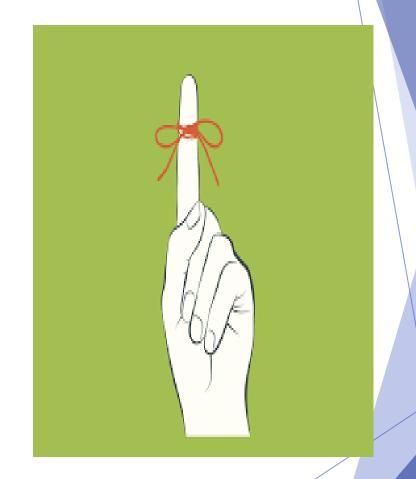
#### Planning & Time Management

The ability to create steps to reach a goal

-www.livelymindstutoring.com

## Working Memory and Attention

Individuals with ASD / ADHD often have reduced working memory capacity.



https://www.youtube.com/watch?v=HszXKZO\_H18



## Hyperfocus

Extended, Highly Focused Attention

## Common in autism and ADHD

"To get my attention, please use light touch. Gently remind me that it's time for a break and then give me some time to transition away."

It is ideal to harness hyperfocus rather than avoiding certain activities that awaken it.



Hyperfocus is a phenomenon that reflects one's complete absorption in a task, to a point where a person appears to completely ignore or 'tune out' everthing else.\*

"I set alarms to do things I otherwise might forget, like to take breaks, drink water, and eat."

"Please make sure you have my attention before talking to me or asking me to do something."

"When I'm hyperfocusing, it is very difficult to distract me. Therefore, I can accomplish many tasks in a compressed amount of time at work."

## Lifestyle



How can we support children and YP on the Autism spectrum and who have ADHD?

Liaising with school

## Language

- Speak at a slower pace
- Break instructions down into steps
- Keep it to the point
- Not too much information at once (SALT reports are useful)
- ► Talk about what they want to talk about, use their interests
- Use specific language, be mindful of literal understanding and avoid sarcasm and idioms
- Use visuals to support what you are saying and to help them communicate to you

Talking Mats | Improving communication, improving lives



### **Executive Functioning**

- ► Help to organise thoughts
- Know what is expected of them
- Provide structure
- ► Giving directions:
  - Number of directions give a minimal number of directions or steps at a time. If necessary, have the young person repeat the directions, to an adult or a peer.
  - Form of directions provide written directions or steps; or a visual model of a completed project.

## **Executive Functioning**

- ► Tasks:
  - ▶ Break tasks into smaller units
  - Limit amount of content per page
  - ► Allow extra time for completing tasks
  - Provide work breaks
  - ► Allow young person to use a computer to type or speech to text software.
  - ► Reduce the length of written assignments.



## Additional Interventions to Improve EF

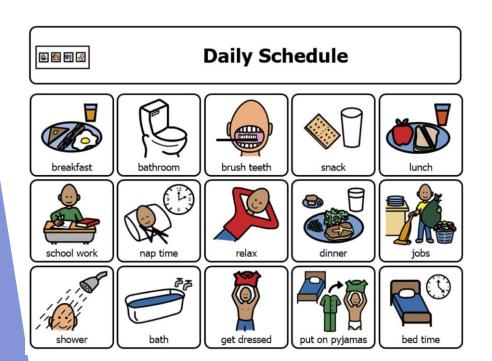
- Physical activity
- Stress reductions and mindfulness

Something to do, to be able to move, to be able to talk, or to be able to fidget when concentrating.

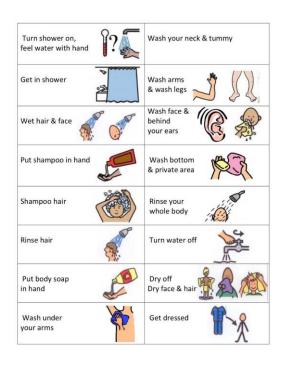


## Using visuals to create structure, understanding, consistency and predictability

- Structure, consistency and predictability
  - visual timetables
  - timers, clocks, countdown systems







# Engagement in tasks (homework, direct work/gaining views)

- Now and next board
- Task boards
- Using their interests, following their lead



#### Social skills

#### Comic strip Conversations

- Comic strips (developed by Carol Gray) are a visual way to help explore a young person's thoughts and feelings about a situation.
- They can be good way to explore and talk about feelings, as the focus is not directly on the young person.
- You can use a comic strip conversation to break down social situations that may have been confusing or upsetting for a young person.
- Using a comic strip with a young person can help them to understand more about the way they, and others communicate and why a misunderstanding occurred



#### **Social Stories**

How to invite a friend to play

Supermarket shopping

Keeping safe

#### **EXAMPLE**

My toys

My toys belong to me. They are mine.

Many of my toys were given to me

Some of my toys have my name on them.

I may play with my toys or share them with someone.

I have toys that are mine.

Carol Gray's The new social story book, 2015

#### **EXAMPLE**

There are many kinds of teachers in school. (Descriptive)

It may be hard to get used to new teachers because I don't know them very well. (Descriptive)

I will have a new teacher next year. (Descriptive)

Her name is Mrs. Jones. (Descriptive)

She will visit me on Tuesdays until the end of the year for a short time before lunch. (Descriptive)

When I am with Mrs. Jones, I will try to be a good listener. (Directive)

It may be fun to meet with Mrs. Jones because we might play games, listen to music, or just talk. (Descriptive)

Conversational skills

sharing

Understanding friendships

What to do when I am upset

Understanding playtime

https://www.autism.org.uk/advice-andguidance/topics/communication/communication-tools/social-stories-and-comicstrip-coversations Going on a school trip/special occasion

How to join a conversation

## Mini Strategy Card

#### Staring at Other Pupils

When I look at other pupils for too long, they think that I am staring at them. They think that I am being rude. This makes them feel annoyed or angry with me. I need to try not to look at other pupils for so long.



## What to do....cards

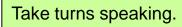
#### **Talking with others**

Look at the other person, but try not to stare.



Listen to the other person.

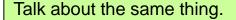
Show interest by asking one or two questions.





Try not to stand too close or too far away.

Speak at the correct volume and speed.











## Self-Monitoring Techniques:

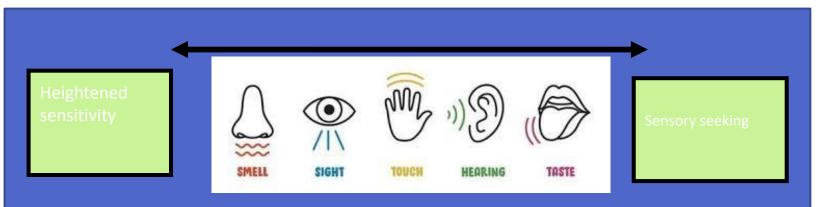
## **Options Card**

If a student bumps into me, I can:

Ask him if he meant to hurt me.

- If he says no, I can say "okay".
- If he says yes, I can ...
  - Ask him why.
  - Tell him how it made me feel
  - Ask an adult for help.

# Meeting sensory needs - environmental modifications and sensory objects











Sensory clocks and timers

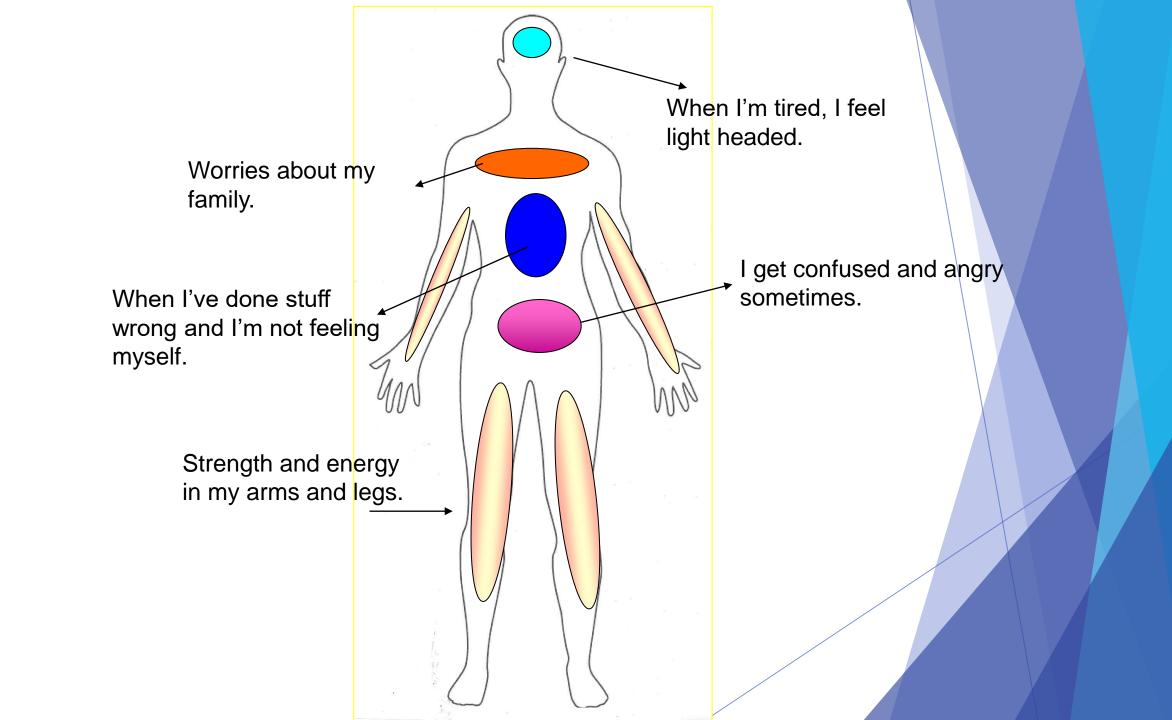
10 Jumping Jacks	
Run in place for 1 minute	
10 Wall pushups	
String beads	

## **Emotional Wellbeing**

People with Autism / ADHD can struggle with high levels of anxiety due to:

- Unpredictability
- Struggling with social situations and expectations of these
- Sensory experiences
- Identifying and describing their own emotions and needs

Emotions can be expressed in lots of different ways e.g. anxiety can be expressed through anger. Important to know child and how they express when they are struggling.



### Ways of Reducing Anxiety

Identify some of the stressors

Modify the environment

Ask 'What's changed?'

Understanding their anxiety

- De-stressing Routine
- Clear Routines
- Visual Timetable
- Safe Haven
- Sensory
  Room/space

- Movement breaks
- Distraction Techniques
- Quiet atmosphere
- Sensory breaks

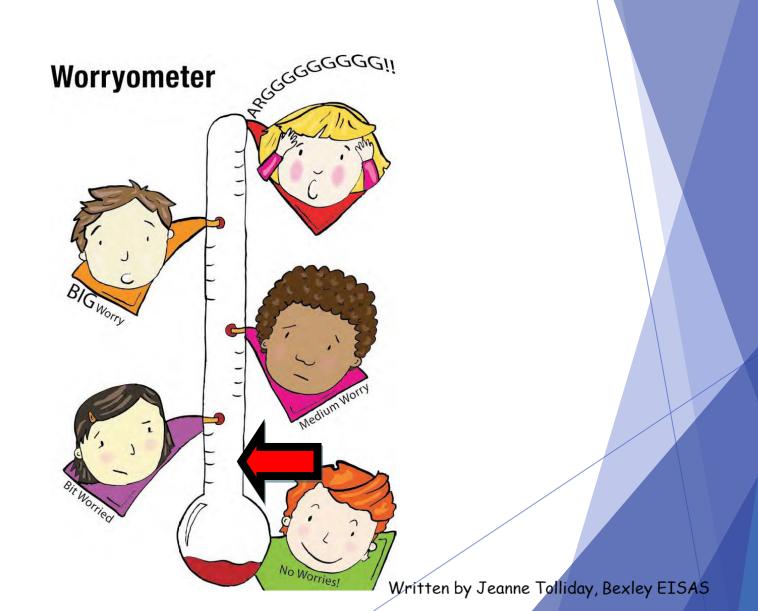


An ABC Chart is a helpful tool to establish where and when a YP is finding something challenging e.g. incidents always or after lunchtime or during group work in lessons

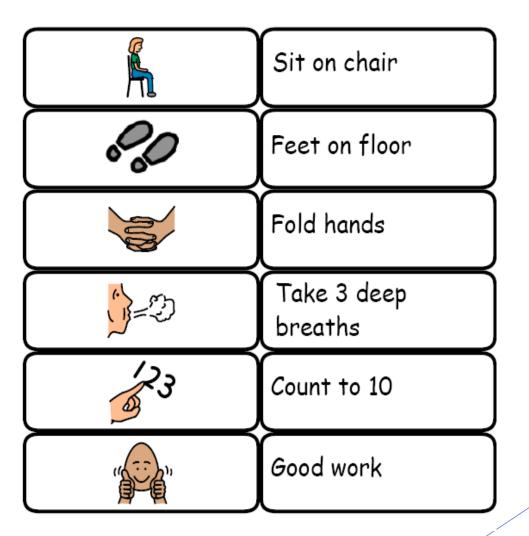
## **Emotion Key Ring**



### Identifying the size of the worry



### Calming Down Visual Support



### 3 Comforting Thoughts



#### Problem Solving Skills

What is the problem?:

What are all the things I can do to handle it?

1.

2.

3.

What will happen if I do each of those things?

1.

2.

3.

Which way of handling it is the best?

Now that I have tried it, how did I do?

Can I do anything differently next time?

### Giving Effective Instructions

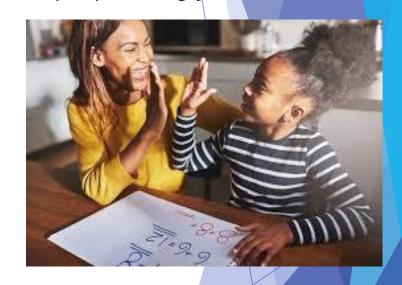


- Stay calm. It models appropriate behaviour and prevents raising your voice.
- ▶ Be clear and straightforward. "Please go and get your coat," not, "Can you go and get your coat?"
- Give instructions one at a time. A series is harder to remember.
- ▶ Wait for follow-through. Catch it with praise.
- Avoid "no," "stop," and "don't." Say what you want the young person to do.

### Specific Praise for Positive Behaviours

\* "Well done for finishing your work!"

- Be Specific\*
- Be Consistent
- Be Sincere
- Occurs immediately after the behaviour
- Use non-verbal re-inforcers
- Use at a high dose (3:1 ratio)
- Focus on behaviours you want to increase



### ABC Chart - Antecedents Behaviour Consequences

Date/Time	Activity	Antecedent	Behavior	Consequence
Date/Time when the behaviour occurred	What activity was happening when the behaviour occurred	What happened right before the behaviour that may have triggered the behaviour?		What happened after the behaviour, or as a result of the behaviour
4Monday	Children	Children lined up for	Hit a child (D)	Class Teacher
15 <sup>th</sup> March	quietly	break time in the	in front of him	said he could not
at 5 pm	standing in	classroom.	while standing	go out to play.
	the line.		in line.	

**Activity:** This is the most recent event that led to the behaviour of concern. Fill in one row of the chart for this event.

### Behavioural Intervention

- ▶ What is the behaviour?
  - -Define behaviours in **specific**, **observable** & **measurable** terms
- When does it take place?
- ▶ Where does it take place?
- With Whom does it take place?
- Why does it take place (i.e., what's the function of the behaviour)?
  - -Sensory
  - -Escape
  - -Attention
  - -Tangible

### Reinforcement Strategies

#### Reinforcement Strategies

- Praise, Praise, Praise
- Parent collaboration

#### Verbal Feedback

- Verbal praise
- Verbal redirection
- Corrective feedback
- Options for the young person

# The Zones of Regulation - Promoting self-regulation

The Zones is a systematic, cognitive behavioural approach used to teach self-regulation by categorizing all the different ways we feel, and states of alertness we experience, into four concrete coloured zones.

#### Use to promote:

- High quality rapport through attuned interactions (emotion coaching approach)
- Emotional literacy
- Development of emotional regulation
- Development of meta-cognition

CYP are encouraged to recognise and categorise their emotions based on the colour of Zones

Meta-cognition is encouraged through activities aimed at identifying 'Tools' to help regulate emotions and behaviours associated with each zone.

The goal is to work towards being in the Green Zone (regulated and ready to learn).

The Zones encourage a collaborative approach to managing emotions between Staff and Students, eventually encouraging the student to be more independent with self-regulation.

























#### **BLUE ZONE**

Sad Sick Tired Bored Moving Slowly



Happy
Calm
Feeling Okay
Focused
Ready to Learn

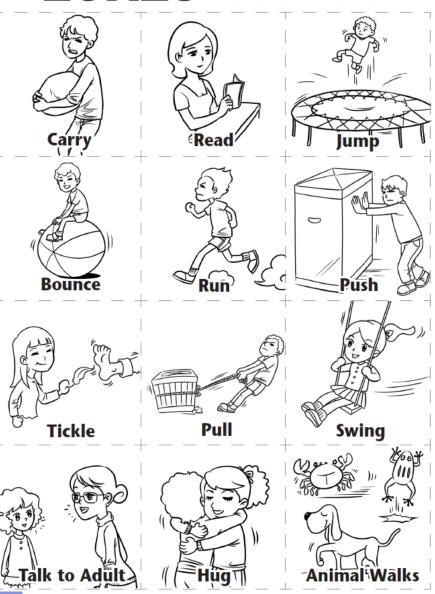
#### YELLOW ZONE

Frustrated
Worried
Silly/Wiggly
Excited
Loss of Some Control

#### **RED ZONE**

Mad/Angry Terrified Yelling/Hitting Elated Out of Control

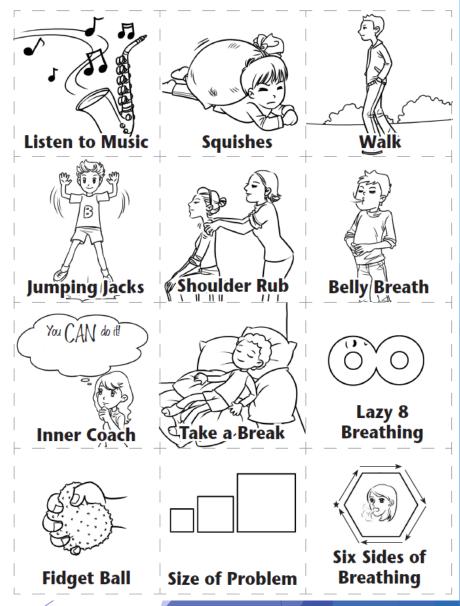
### **ZONES** Tools Menu



Children are encouraged to select and try out a range of tools to help with regulating themselves.

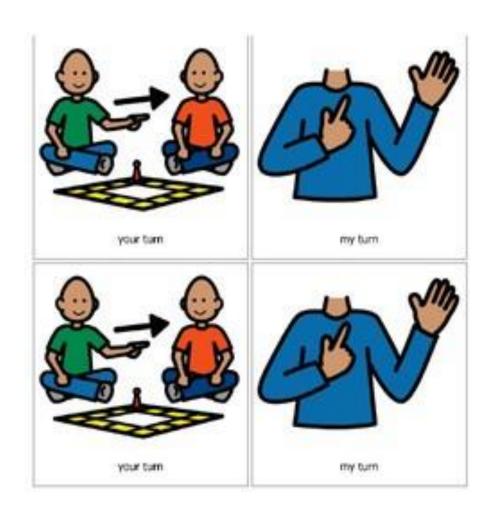
Adults support in this stage and encourage children to discuss which tools work for them.

## **ZONES** Tools Menu



### **Environmental Modifications**

- Social environment
  - Organised activities
  - ► Play dates
  - ► Time-limited activities



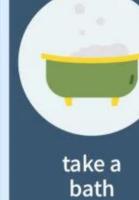
### Lifestyle Support: Sleep

- ► Cut out sugar and caffeine within a few hours of bedtime.
- Avoid screen time for an hour before bed.
- Avoid doing stimulating activities and projects that require hyper focusing in the evening.
- ▶ Make the bed a stress-free zone reserved for sleep.
- Get enough exercise and sunlight during the day.
- Develop an enjoyable bedtime routine, such as rereading a favourite book, spending time with pets, or taking a warm bath.
- ► Keep the bedroom dark, cool, and quiet.
- ▶ Go to bed and wake up at the same time every day, choosing a time that is realistic and age-appropriate to get the recommended sleep for the age group.
- People with ADHD also frequently have trouble waking up in the morning. For help getting out of bed, plan something enjoyable for when out of bed, such as exercise or a nice breakfast.

### Bedtime Routine 🌟



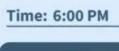


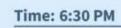












Time: 6:50 PM

teeth

Time: 7:00 PM





Time: 7:15 PM



Time: 7:30 PM



get into bed

Time: 7:45 PM

Time: 8:00 PM

sleep



Time:



Any

Questions?

### Resources

#### ASD:

- Bexley's Autism Advisory Service is able to provide sessions to help older children and Young People understand their diagnosis in school. They work carefully with the YP and their family.
- Principles of discussing diagnoses with young people:
  - Keep it simple
  - Emphasis on the child/YP's strengths, do not talk as if it is a negative and help them identify things that they might find difficult. An 'all about me' book can help support this thinking and their identity.

Autism: Talking about a diagnosis by Rachel Pike (available from National Autistic Society. Parents and carers (autism.org.uk)

<u>Amazing Things Happen - by Alexander Amelines - YouTube</u> - Video for siblings or peers who do not understand Autism and the impact it has.

An Introduction to Autism for Adoptive and Foster Families. How to understand and help your child. By Katie Hunt and Helen Rodwell

- 'Teen Life'
- **▶** Bexley branch of National Autistic Society

Janet Franklin- Branch secretary 07826 950496

bexley.branch@nas.org.uk

Bexley Voice:

Post Diagnosis workshops for parents and carers - ASD

Bexley SNAP

Clubs for disabled children and young people

► Youth Action Diversity Trust;

Time Out for Parents: ASD course

### Bexley Voice:

Post Diagnosis workshops for parents and carers - ASD

Bexley SNAP

Clubs for disabled children and young people

► Youth Action Diversity Trust:

Time out for Parents: Children with ADHD

#### ADHD:

#### <u>Useful organisations and</u> <u>websites</u>

- The National Attention Deficit Disord er Information and Support Service (ADDISS).
- http://www.addiss.co.uk/
- ADDitude
- https://www.additudemag.com/
- ADHD and You
- http://www.adhdandyou.co.uk/
- ► ADHD Foundation
- https://www.adhdfoundation.org .uk/

#### Born to be ADHD -

https://www.borntobeadho

Children and Adults with Attention-Deficit/Hyperactivity Disorder (CHADD)

#### Great Ormond Street Hospital:

https://www.gosh.nhs.uk/conditions and-treatments/general-medicalconditions/attention-deficithyperactivity-disorder-adhd/

### **Living with ADHD**

https://www.livingwithadhd.co.uk/

- Books
- ► For children and young people
- ► ADHD is Our Superpower: The Amazing Talents and Skills of Children with ADHD by Soli Lazarus and Adriana Camargo (2021)
- The Survival Guide for Kids with ADHD by John F. Taylor (2013)
- Thriving with ADHD Workbook for Kids: 60 Fun Activities to Help Children Self-Regulate, Focus, and Succeed, by Kelli Miller (2018)
- Recommended reading about ADHD for parents/carers, families and professionals:
- All Dogs Have ADHD Kathy Hoopmann (2020) London: Jessica Kingsley Publishers.
- Can I tell you about ADHD? A guide for friends, family and professionals. Susan Yarney (2013) London: Jessica Kingsley Publishers.

ADHD: 102 Practical Strategies for "Reducing the Deficit" (2nd ed). Kim Frank and Susan J Smith-Rex (2001) Chapin, SC: YouthLight, Inc.

How to teach and manage children with ADHD. Fintan O'Regan (2002) Cambridge, UK: LDA Learning Publishing.

Successful managing ADHD: A resource for SENCOs and teachers (nasen spotlight). Fintan O'Regan (2019) Abingdon, UK: Routledge (second edition).

Step by step help for children with ADHD: a self-help manual for parents. David Daley and Edmund J. S. Sonuga-Barke Cathy Laver-Bradbury, Margaret Thompson, Anne Weeks (2010) Jessica Kingsley Publishers

Helping kids and teens with ADHD in school: a workbook for classroom support and managing transitions Joanne Steer and Kate Horstmann (2009) Jessica Kingsley Publishers

#### YouTube Channel

'How to ADHD' https://www.youtube.com/c/HowtoADHD