

Navigating Communication and Emotional Arousal Levels: *Principles and Practical Applications*

06/03/2024

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To read the Neuro Rehab Times article:



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St Andrew's Healthcare



Communication and Arousal



GRICEAN MAXIMS FOR EFFECTIVE CONVERSATIONS

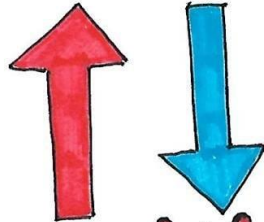
SKETCHNOTE BY HAYLEY LEWIS @Haypsych June 2020



Quality

"BE TRUTHFUL"

- don't say what you believe to be false
- don't say that for which you lack evidence



Quantity

- make your contribution as informative as needed
- don't make your contribution more informative than is needed



Relevance

- be relevant
- pay attention as relevance may change during an interaction



Manner

"BE CLEAR"

- avoid obscurity of expression
- avoid ambiguity
- be brief
- be orderly

Communication and Behaviour

- All behaviour is a form of communication.
- A lack of effective communication leads to **frustration**. Frustration leads to withdrawal or anger and aggression expressed against self or other (BILD, 2002).
- Communication difficulties are associated with an increased prevalence of **challenging behaviour**. (RCSLT, 2019)

Children with emotional and behavioural disorders have significant unidentified communication needs

81%

Young people access youth justice services present with SLCN

60%



For RCSLT Guidance on
“Communication and
Behaviour”

> Communication and PBS

Communication is listed as a **proactive strategy** in Positive Behaviour Support Plans.

Proactive strategies are intended to make sure the person has got what they need and want on a day to day basis.

Communication Guidelines will be listed in the PBS plan.

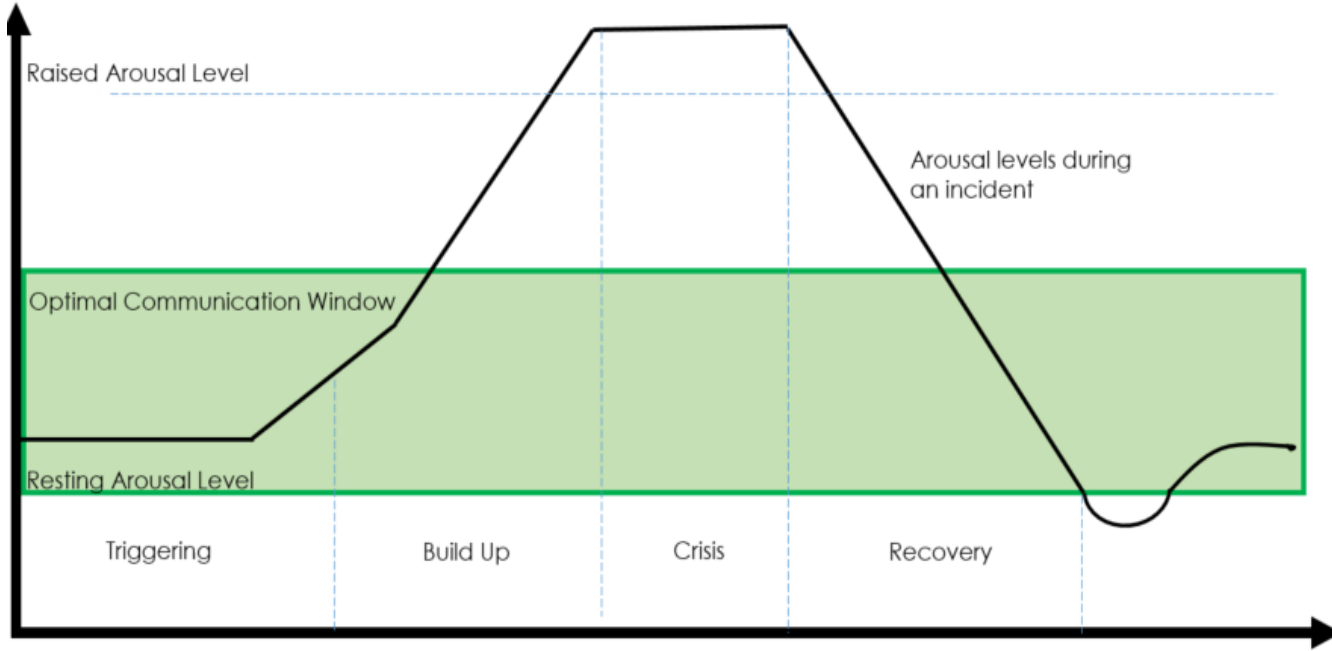
If staff can support effective Communication and avoid Communication Breakdown, we are likely to help keep someone in 'green'.

Property of St Andrew's Healthcare

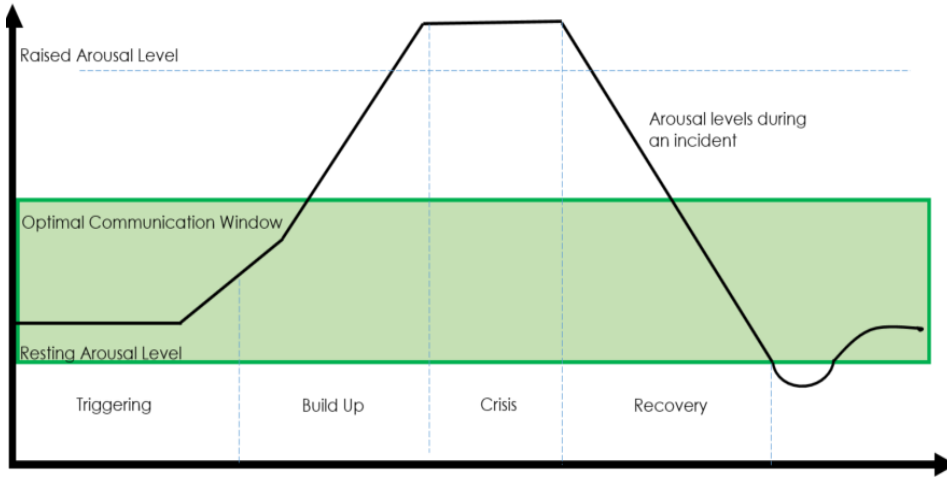
“Staff need to be able to effectively communicate and support the use of core communication systems
(Likely to reduce challenging behaviours)”

Positive Behaviour Support: A competence Framework (2015)

What is the arousal curve?



What is the arousal curve?



- Originally drawn up by Arnett (1989), adopted by Hewett (1994, 1996)
- Plots progress of arousal with incidences of violence most likely near the peak
- 'Optimal' will vary based on the individual
- Apathy and low emotional arousal states, can impact communication negatively too

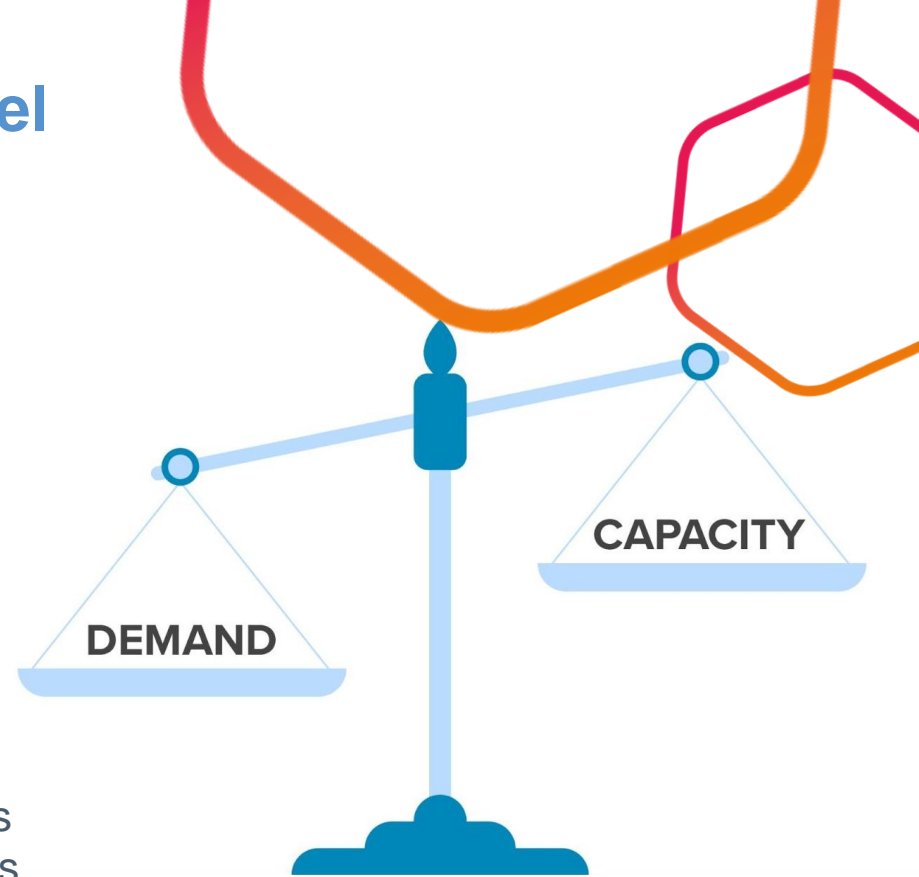


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Demands and Capacity Model

Starkweather & Gottwald (1990)

- If demands on environment are too high, communication breakdown will occur
- Linguistic, cognitive, emotional, and motoric demands can contribute to imbalance between demands and capacity.
- Aim to lessen demands when the capacity is reduced due to high emotional arousal levels.



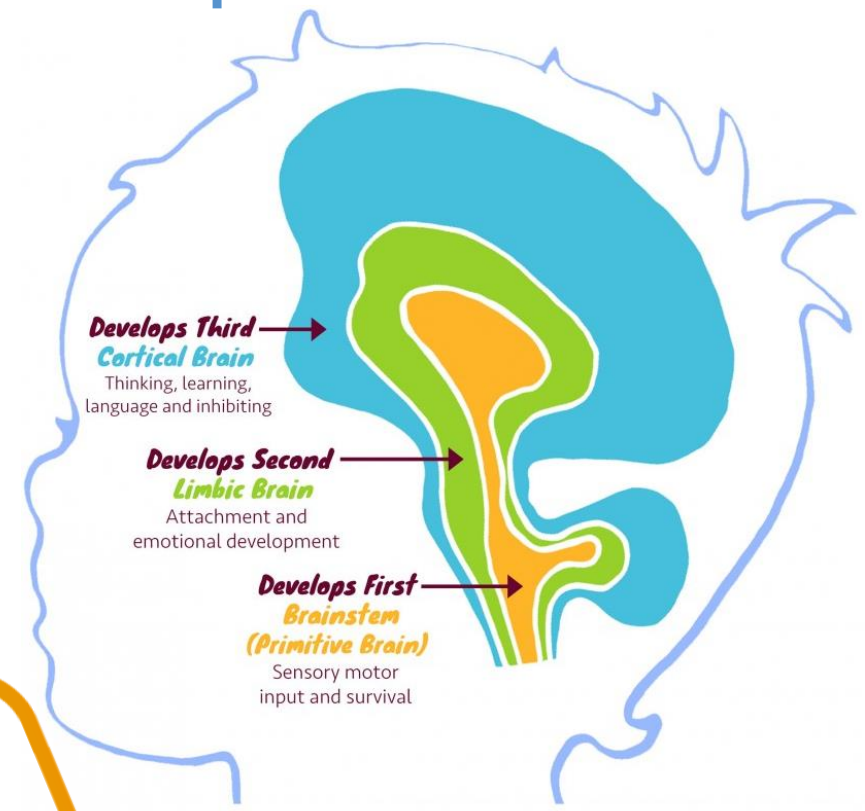
Neurobiological Basis of Emotional Arousal



Three Main Parts of the Brain



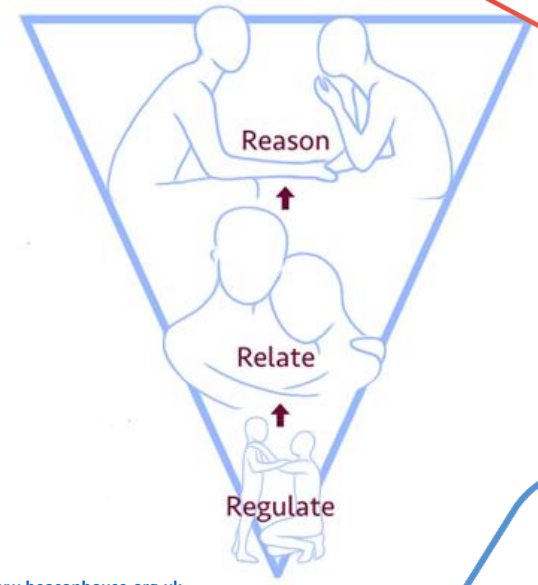
Neurosequential Model of Therapeutics



To learn more about Trauma Informed Care



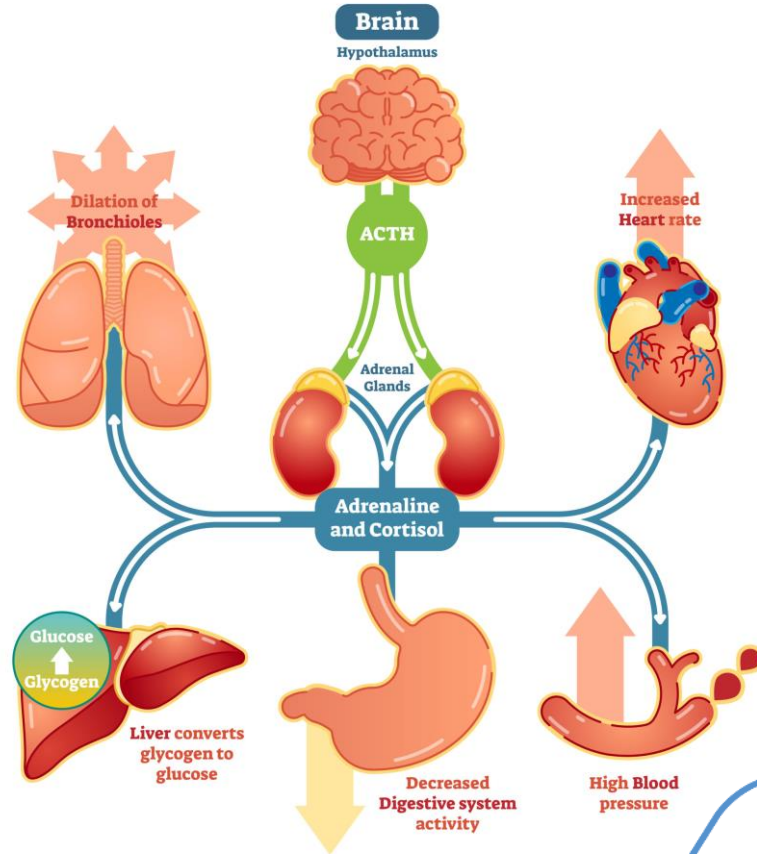
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Stress Response

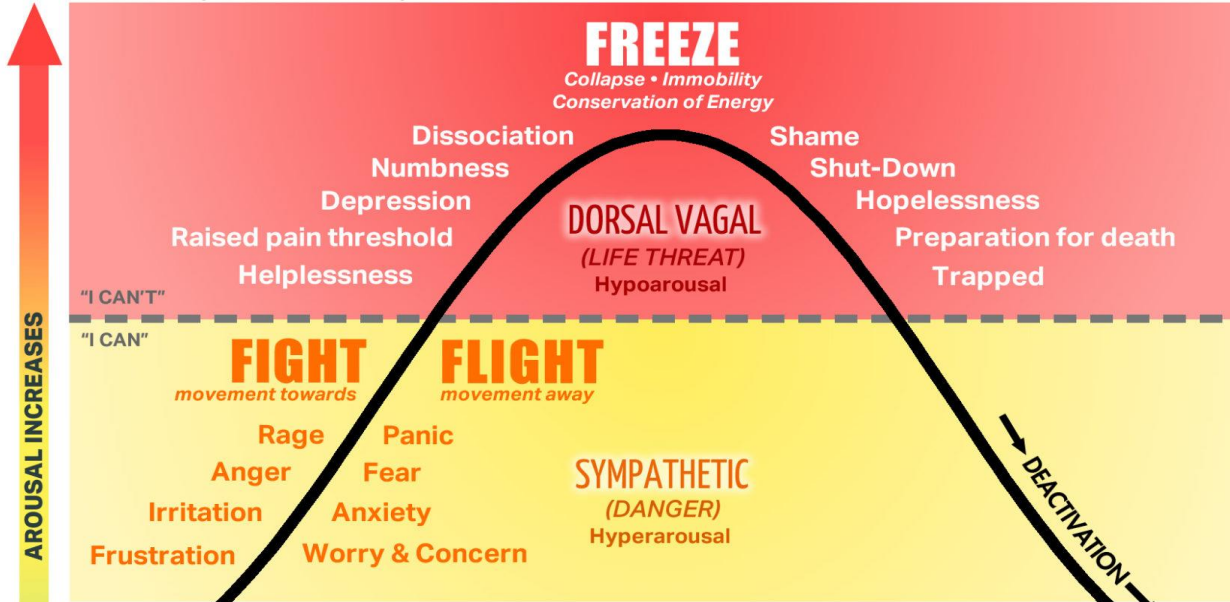
- Exposure to trigger
- Cortisol acid floods
- Neural connectivity slows
- Survival mode activated

STRESS RESPONSE SYSTEM



POLYVAGAL CHART

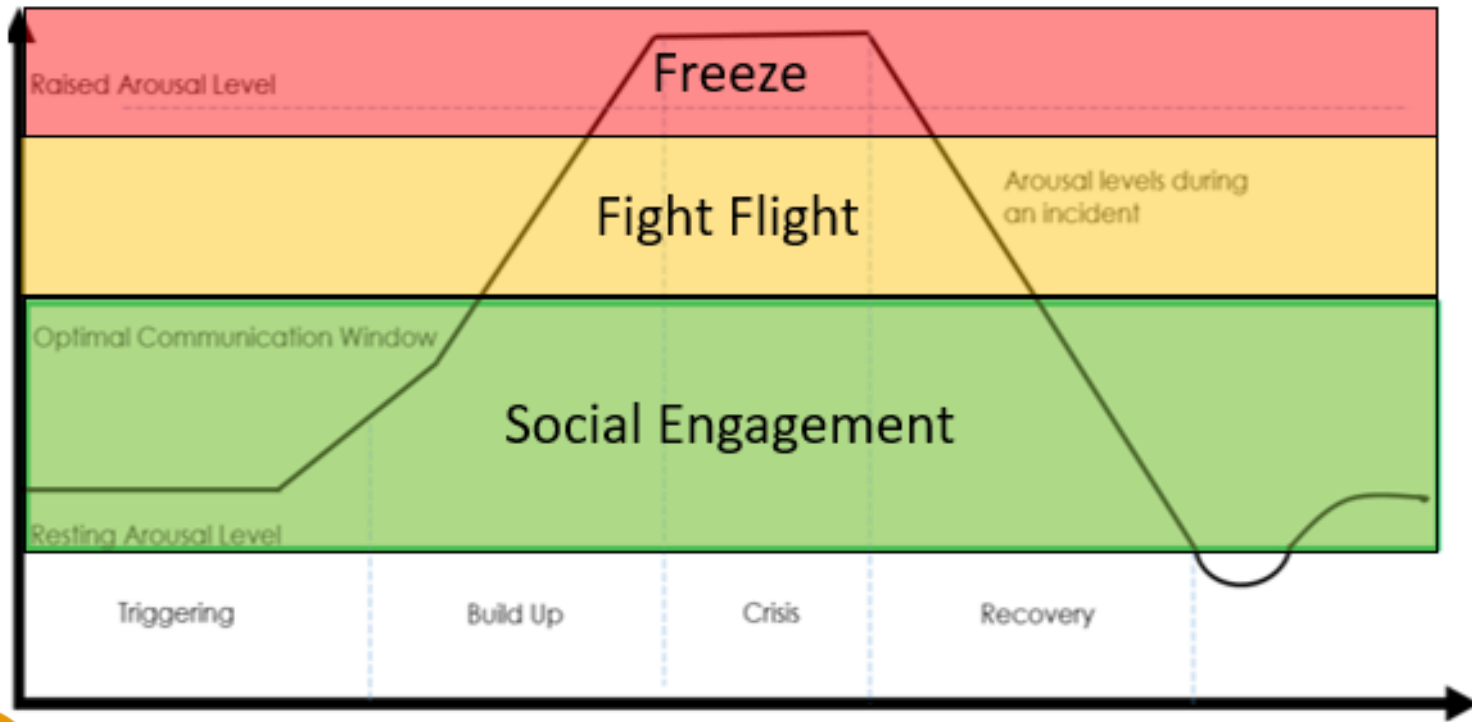
The nervous system with a neuroception of threat:



The nervous system with a neuroception of safety:



> Polyvagal Chart vs Arousal Curve



› Sensory Approaches

Sensory approaches aim to support individuals in achieving the **right sensory input** and regulating that input through the use of a range of approaches, activities and tools.

Patients can become **distressed** and environments can feel/ be **unsafe**. Crisis can occur resulting in the need to use restrictive practices such as restraint and seclusion. Sensory modulation is a key **de-escalation** strategy and can support in the reduction of restrictive practices. It can help people return to their optimum communication window and a place of safety.

Many of our patients have experienced trauma and may also have sensory-related disorders which means they find it hard to regulate their senses/ arousal levels and therefore need **day-to-day support with regulating** sensory information and/ or arousal levels.

Having access to sensory resources and spaces can promote health and wellbeing; supporting the individual in regaining a sense of calm and using their thinking cap!



> The senses



Tactile



Olfactory



Proprioception



Gustatory



Vestibular



Auditory



Visual



Interoception

Sensory Modulation

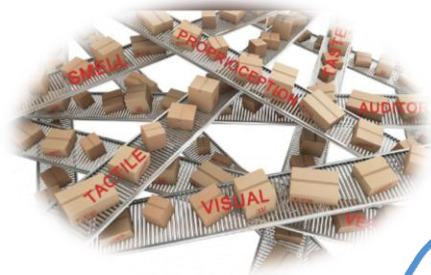


Ineffective Traffic Warden



Understanding the misdirected traffic

Readdressing



Interoception as an example...

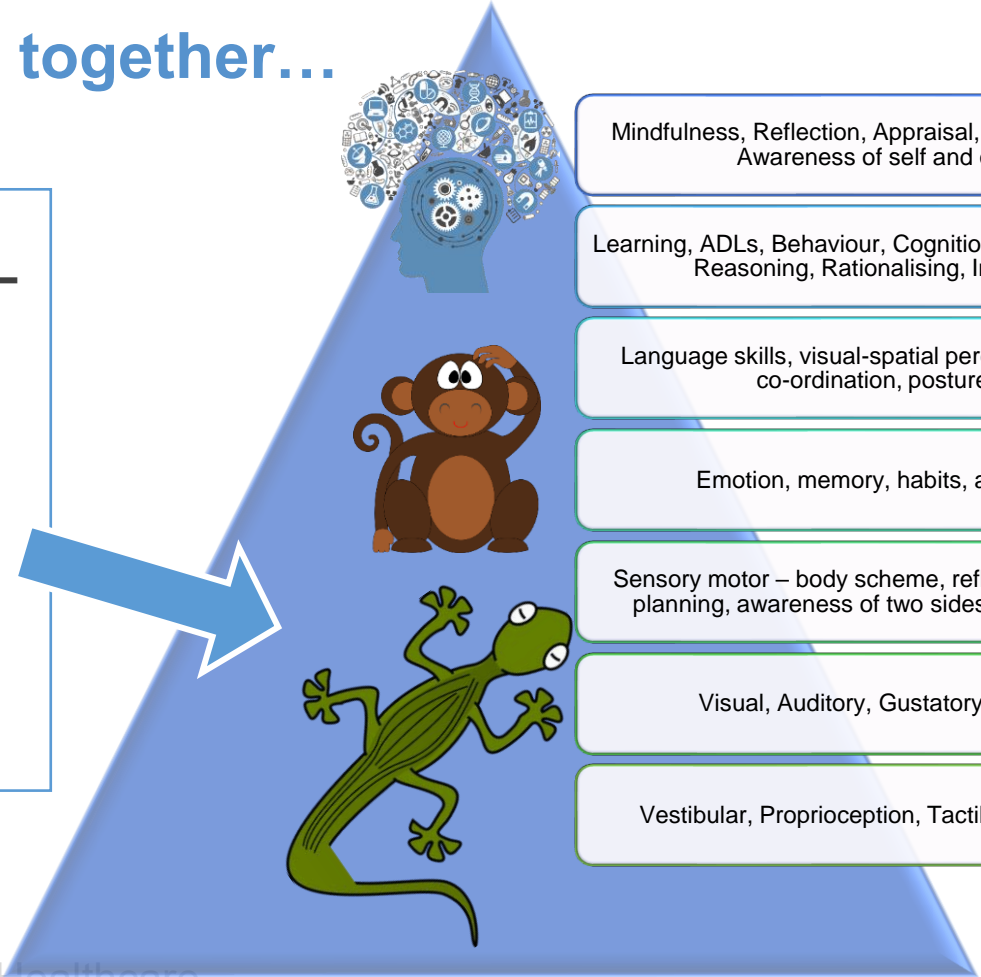
- The brain detects a physiological change to the body's internal state through interoception.
- Example; we see a spider, our body reacts through tensing muscles, heart racing, becoming sweaty. We then might associate these bodily cues with the feeling of fear and our reaction might be to run away, scream, throw something at spider etc.
- Effective sensory processing allows us to notice the 'somatic markers' and attach a bodily cue with a feeling/ action
- Ineffective processing can lead to hypo or hyper sensitivity to the inner body; overwhelming inner experiences, not noticing bodily cues – our traffic officer isn't knowing how to control the flow or direction of sensations.
- Closely linked to the **Polyvagal Theory**; processing difficulties can lead to a sense of disconnection, lack of safety and place people in fight/ flight or freeze
- Examples of treatment;
 - Restoring connection with body, meaningful activity and experiences
 - Playfulness and noticing bodily sensations
 - Safe environments and connecting with others,
 - Interoceptive exposure, mindfulness, timers & schedules



Putting it all together...

Fight/ Flight/ Freeze – Auto Pilot

- Blood pressure
- Heart rate
- Body temperature
- Releasing adrenaline
 - Basic, large movements
 - Pressure
 - Touch
- Sensory based activities



Mindfulness, Reflection, Appraisal, Forward Thinking, Awareness of self and others,

Learning, ADLs, Behaviour, Cognition, Abstract Thought, Reasoning, Rationalising, Imagination

Language skills, visual-spatial perception, attention, co-ordination, posture etc.

Emotion, memory, habits, attachment

Sensory motor – body scheme, reflex maturity, motor planning, awareness of two sides of the body etc.

Visual, Auditory, Gustatory, Olfactory

Vestibular, Proprioception, Tactile, Interoception

Practical solutions to managing stress and reducing arousal levels



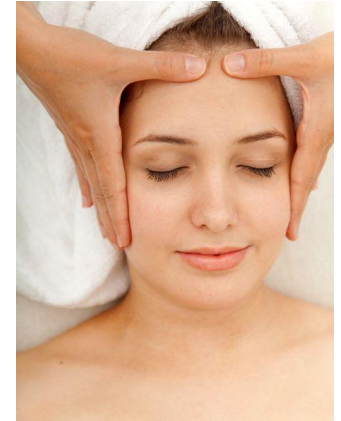
Proprioception

- Proprioceptive information comes from the muscles and joints and so any activity that aids us to release muscle tension can help support someone to feel calm and alert.
- If this is during a build-up or crisis then people might feel muscle tension when angry; tightening of the jaw, fists, arms and so we cannot ignore this and need to find activities to release the adrenaline and tension in appropriate ways.
- Big body movements, deep pressure in muscles and joints.
- Including everyday “heavy muscle” activities into our routine can help us to remain calmer.



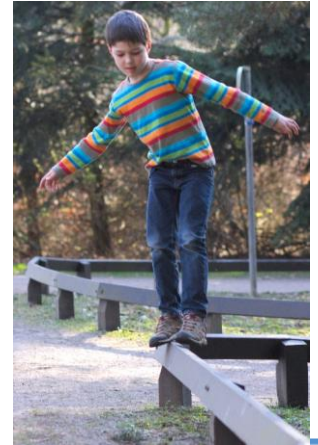
Tactile

- We have calming and alerting receptors in our body that can be stimulated through tactile activities – we need to know our patients and their preferences with this sense.
- **Some patients are defensive to touch (disorder, trauma) - a person may be avoidant, angry, frustrated towards touch. In this case you wouldn't prioritise tactile activities.
- Comfort and touch are a basic human function; mothers and children, partners, hugging, closeness.



Vestibular

- Vestibular information comes from the receptors in our ear.
- Lateral movement is calming
- Activities that can make us challenge or work on our sense of balance and coordination can also help to reduce anxiety and support alertness.





Connecting, Playfulness, Engaging, Meaningful Occupations



YOGA: strike a pose

padmasana (Lotus)	padmasana (Lotus)	padmasana (Lotus)	padmasana (Lotus)	padmasana (Lotus)	padmasana (Lotus)	padmasana (Lotus)
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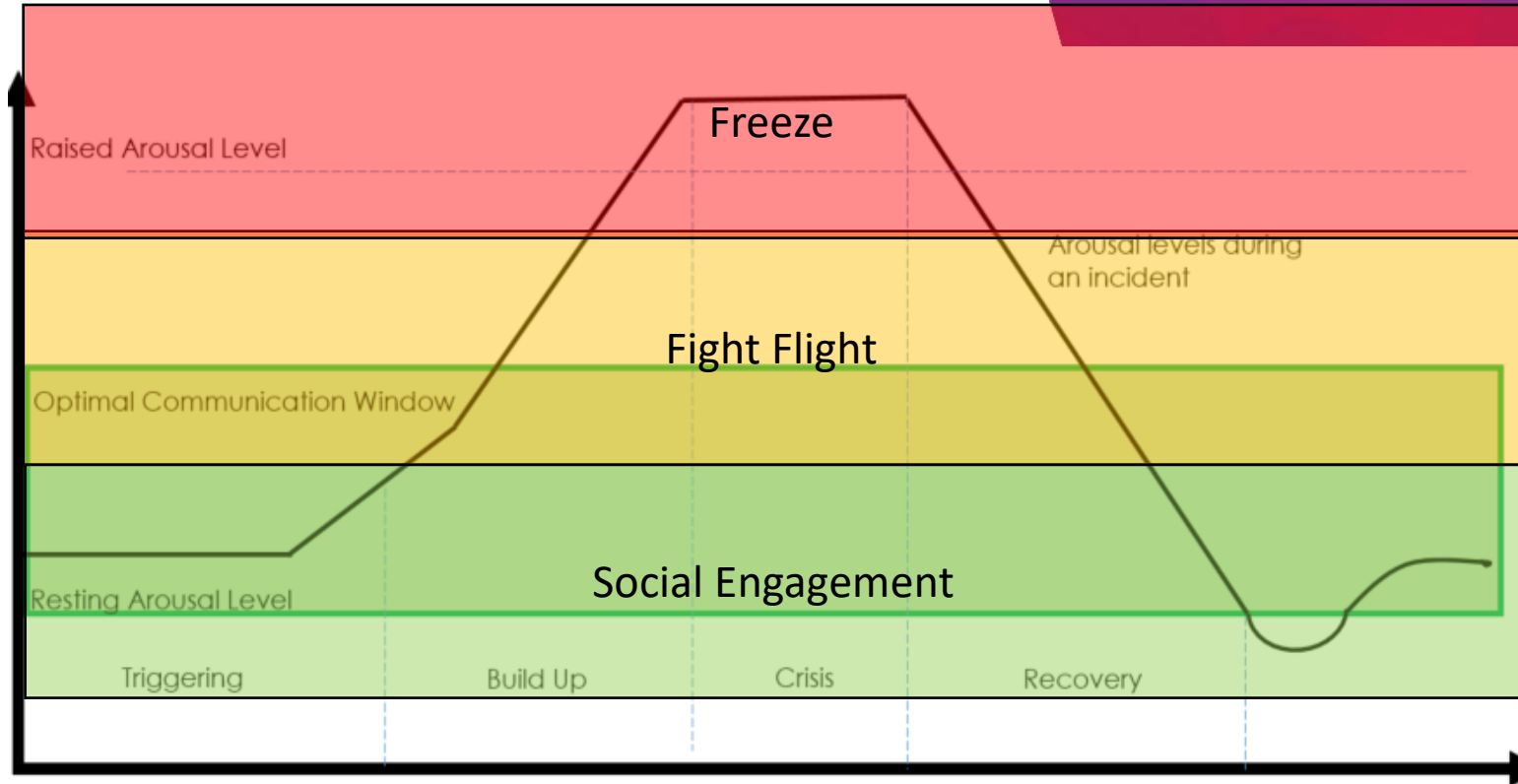
For Beginners
 For Beginners & pregnant women
 For Intermediate practitioners

original from How to do the 81 Lotus Poses

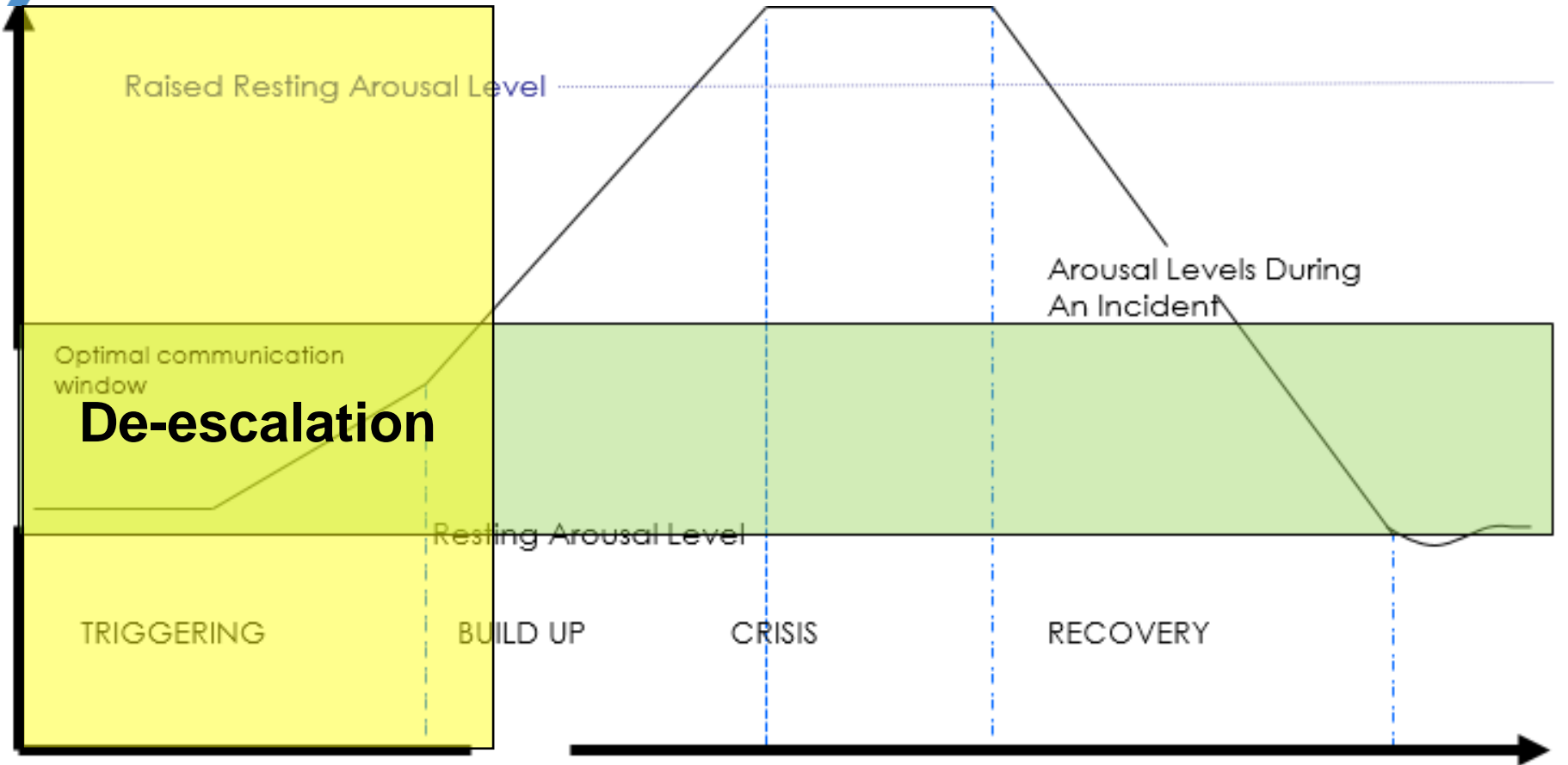


Principles of Navigating Communication Across Arousal Levels

Communication and Arousal



Communication and Arousal

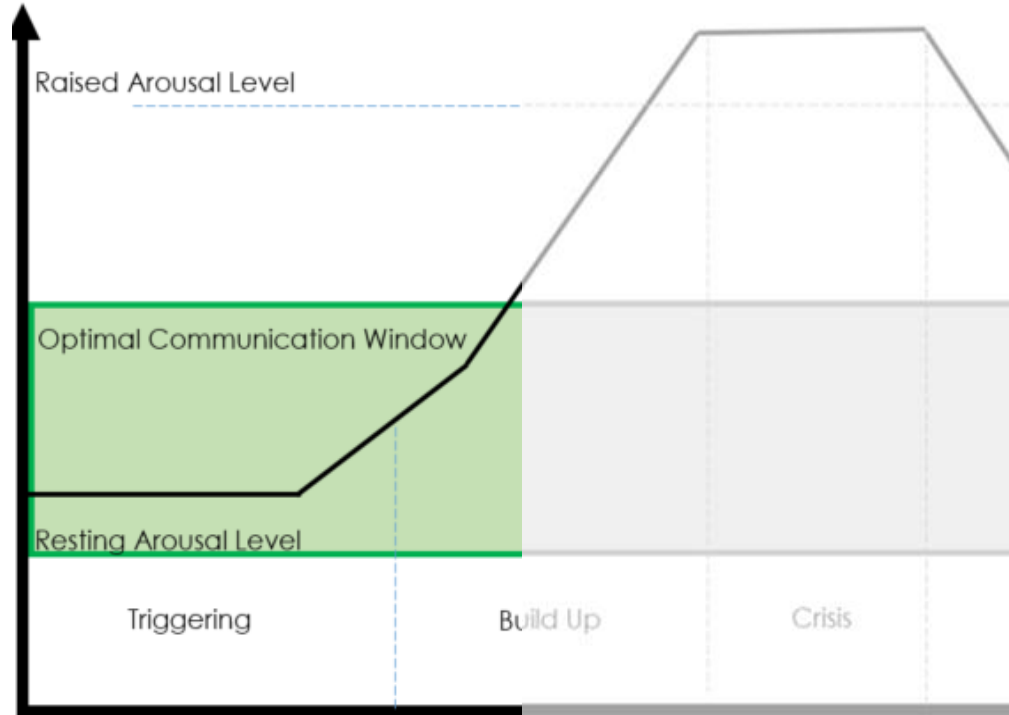


Communication and Arousal

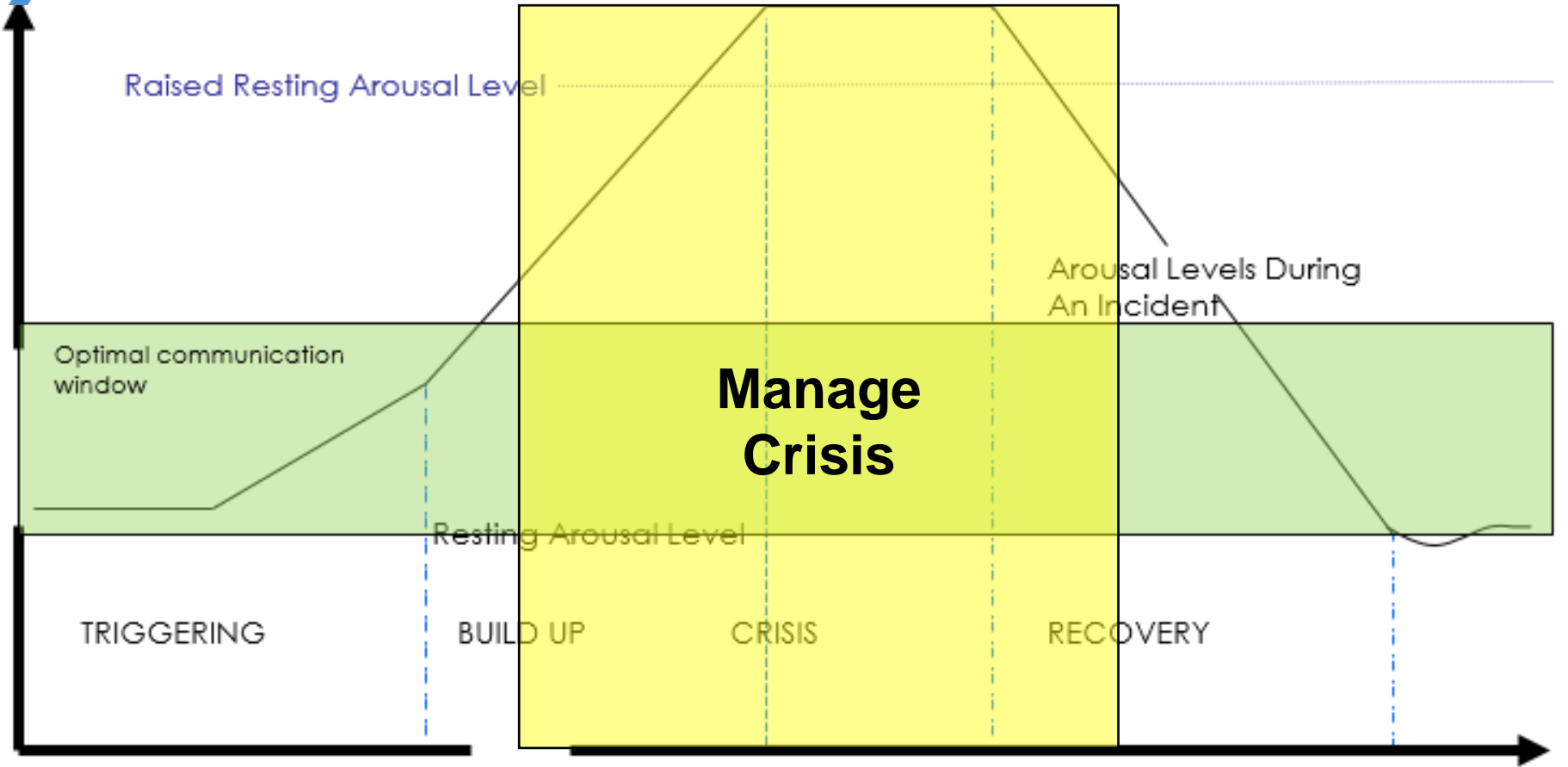


De-escalation

- Involve staff that have a good rapport with the patient.
- Trying to provide opportunities for the patient to communicate
- Open body language
- Short, simple, clear sentences
- Important to think about what it is that helps the person to feel calm and relaxed. Focus on the positive
- Communication Guidelines provided by SLT:
 - -Used consistently to support the individual to communicate their needs in a way that does not lead to challenging behaviour



Communication and Arousal

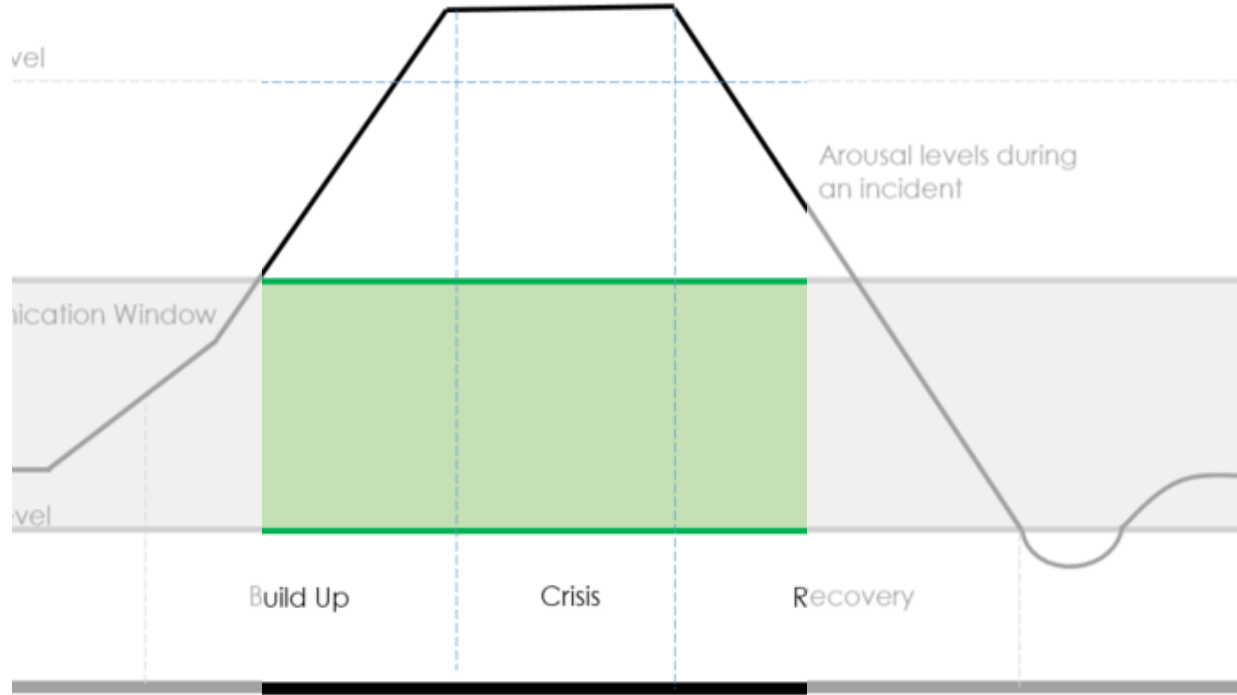


Communication and Arousal

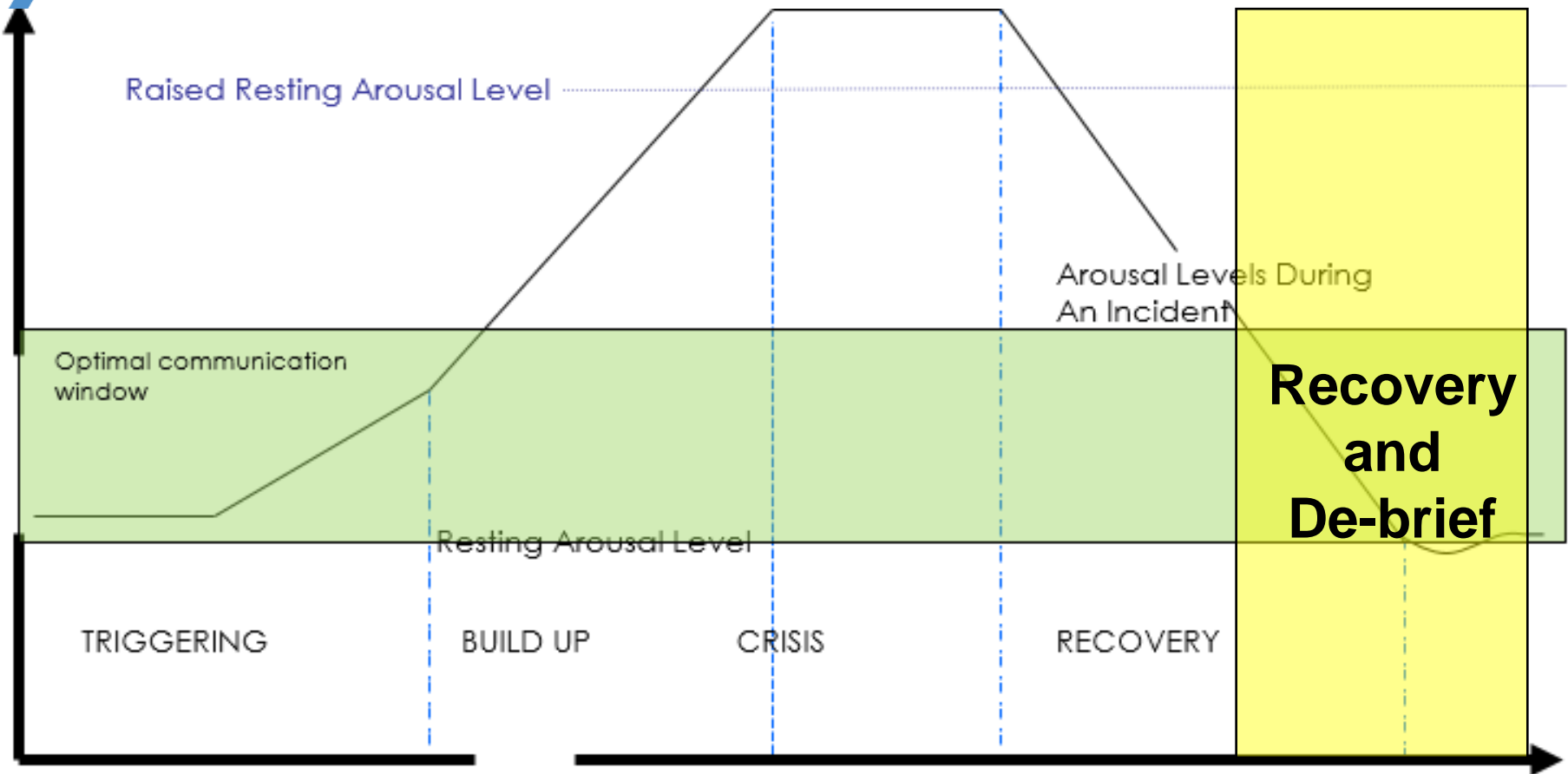


Manage crisis

- Avoid too much talking, as understanding dips in high arousal state
- One person talking at a time
- Reduce questioning



Communication and arousal levels

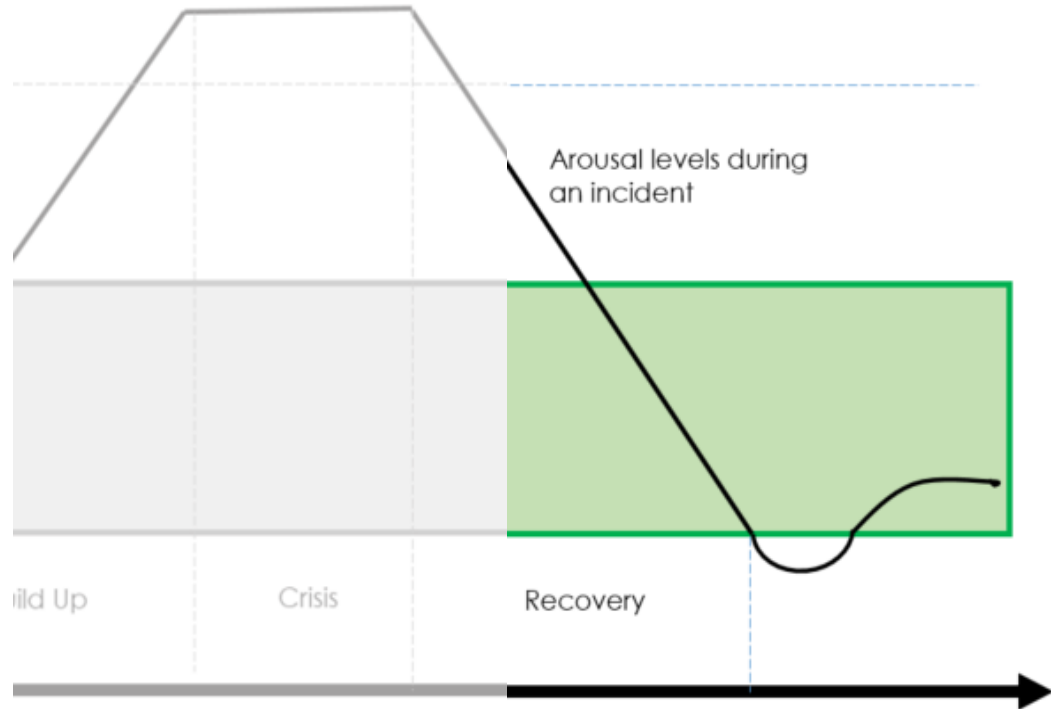


Communication and Arousal



Debrief

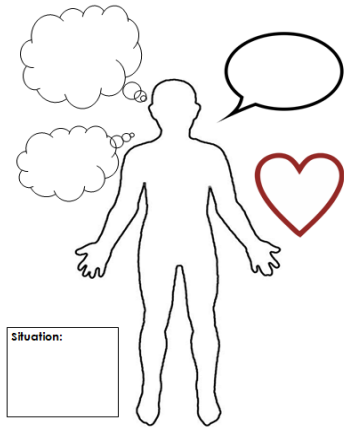
- Avoid higher level questions when asking about the incident
- Create opportunities and means to communication– for example using visuals when explaining what happened
- Provide a positive experience
- Be comfortable with silence
- If the individual is struggling to communicate post-incident, this could lead to an increase in challenging behaviours.



Meaningful debriefing

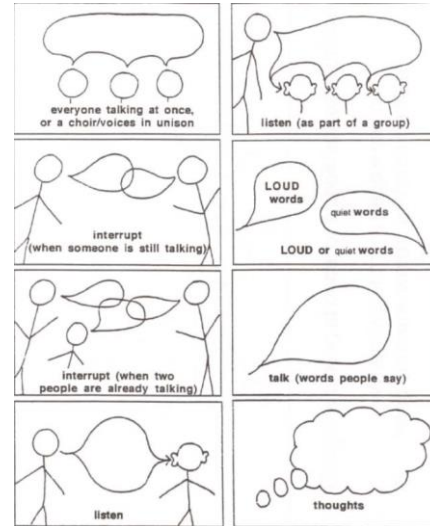


- Using visual supports during the debriefing process can help support with learning, reflection (for all parties) and help reduce recurrence of incidences.



Situation:

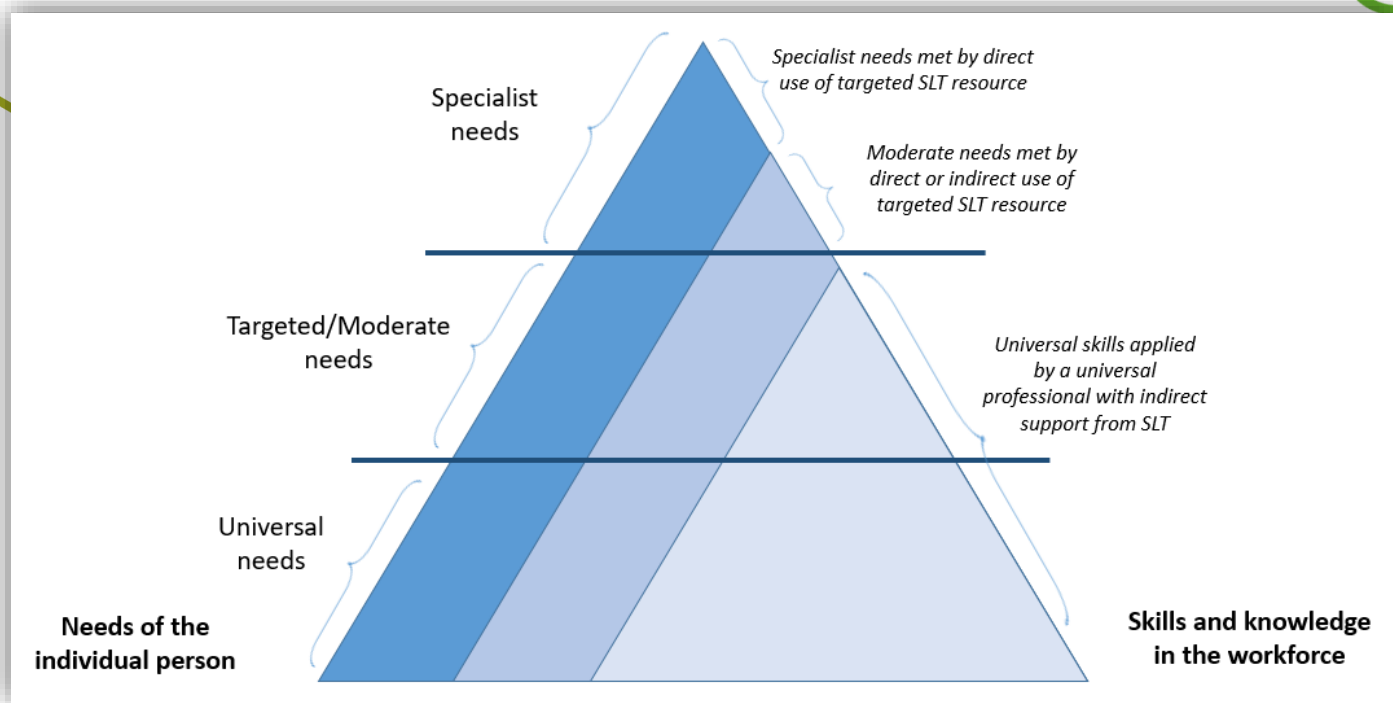
WHO: Who was there?
WHAT: What happened first? What happened next?
WHY: Why did it happen?
HOW: How did it happen?
WHEN: When did it happen?



Creating an Arousal Curve Plan



SLT Input



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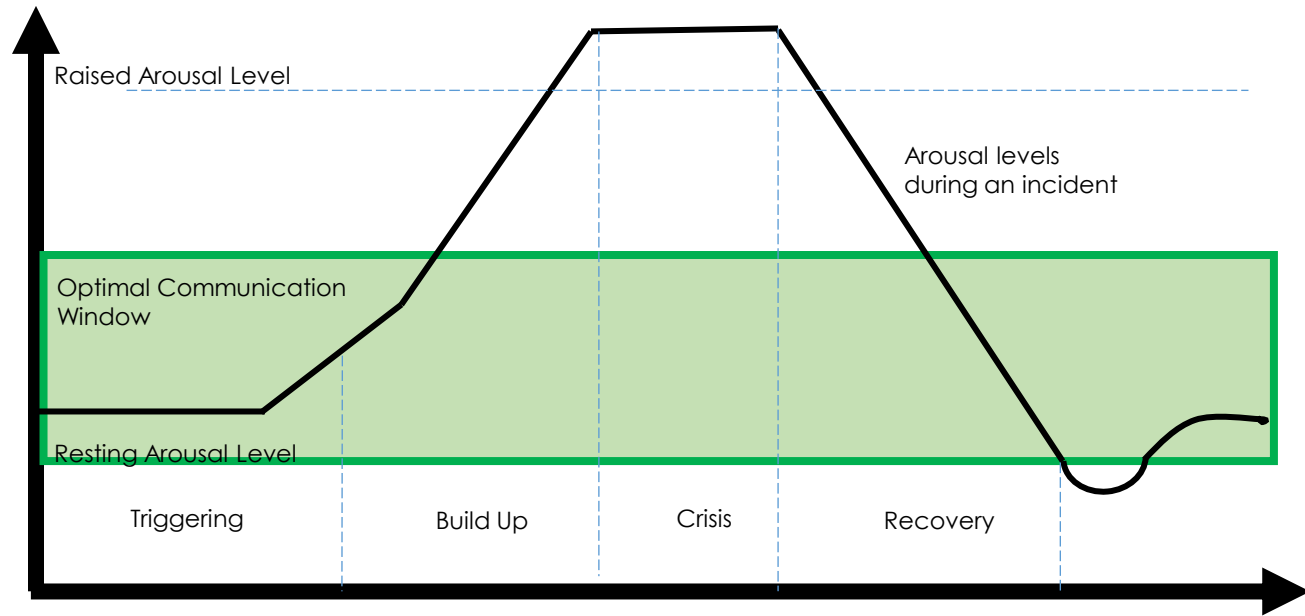
'Come-down'

Stage	Triggering	Build Up	Crisis	Recovery
What happens			<i>'Incident'</i>	
How staff can help				

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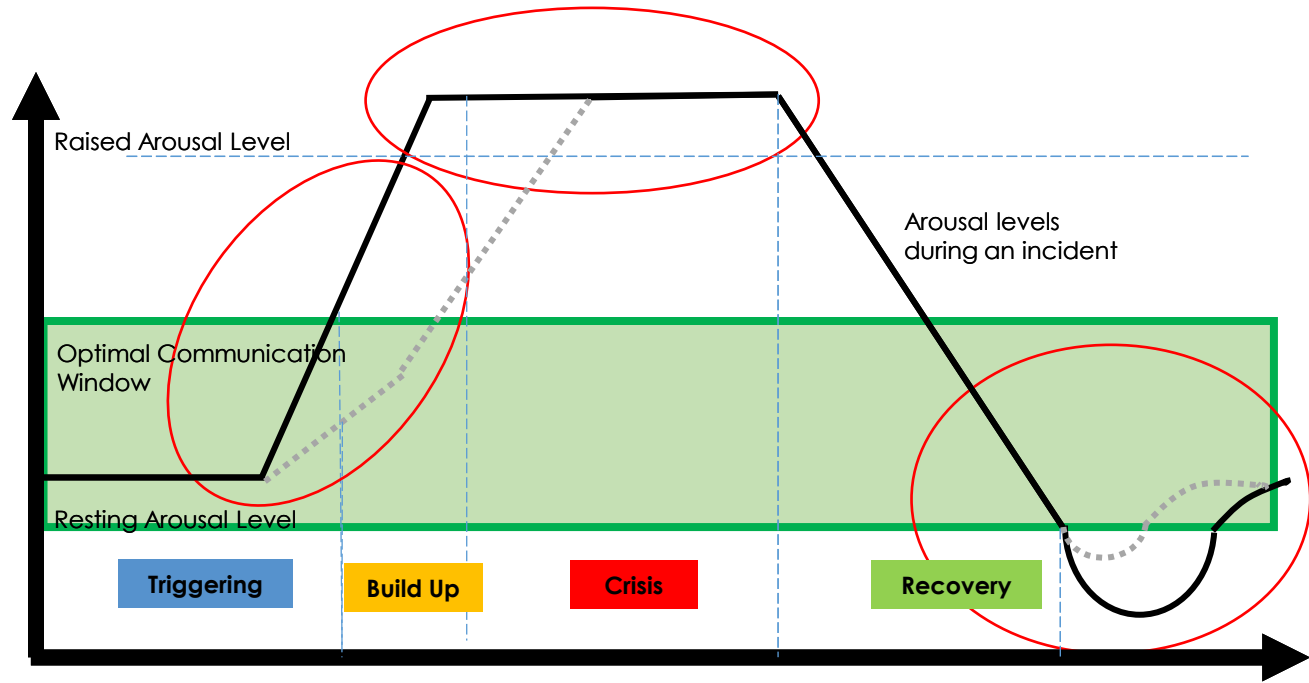
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Stage	Triggering
What happens	<ul style="list-style-type: none"><li data-bbox="239 194 529 259">• I can communicate okay<li data-bbox="239 266 529 369">• I can have conversations with people<li data-bbox="239 375 529 478">• I might start talking about my dog who died<li data-bbox="239 484 529 543">• I might start to swear more

Stage	Triggering	Build Up
What happens	<ul style="list-style-type: none">• I can communicate okay• I can have conversations with people• I might start talking about my dog who died• I might start to swear more	<ul style="list-style-type: none">• I won't talk to people I don't know• I say no a lot• It takes me a long time to process what people say• I find it hard to think straight and move• I will not look at anyone

Stage	Triggering	Build Up	Crisis
What happens	<ul style="list-style-type: none"> • I can communicate okay • I can have conversations with people • I might start talking about my dog who died • I might start to swear more 	<ul style="list-style-type: none"> • I won't talk to people I don't know • I say no a lot • It takes me a long time to process what people say • I find it hard to think straight and move • I will not look at anyone 	<ul style="list-style-type: none"> • If staff ask if I am ok, I will nod. I am not ok though. • I can hear but I can't listen. • My brain feels switched off • I get aggressive • I make threats that I don't actually mean

Stage	Triggering	Build Up	Crisis	Recovery
What happens	<ul style="list-style-type: none"> I can communicate okay I can have conversations with people I might start talking about my dog who died I might start to swear more 	<ul style="list-style-type: none"> I won't talk to people I don't know I say no a lot It takes me a long time to process what people say I find it hard to think straight and move I will not look at anyone 	<ul style="list-style-type: none"> If staff ask if I am ok, I will nod. I am not ok though. I can hear but I can't listen. It's like a seive My brain feels switched off I get aggressive I make threats that I don't actually mean 	<ul style="list-style-type: none"> My speech feels like it is in slow motion It might take a full day for my communication to feel 'normal' again I avoid talking about what happened as I feel guilty

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How staff can help	<ul style="list-style-type: none"> Remind me of my goals Remove me from the situation Use humour to distract me Offer me 1:1 opportunity to talk about what I'm feeling 			

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Stage	Triggering	Build Up	Crisis	Recovery
Sensory Strategies	<ul style="list-style-type: none"> Suggest I engage in an activity I enjoy; something simple and fun. I like shooting hoops, listening to music, tai chi. Get me to think about what emotion I am feeling and what might help me in my 'cool down' box; fidget, deep breathing exercises, lavender. 	<ul style="list-style-type: none"> Support me to use a quite, safe space. I like to sit in the sensory room with the lights off, listening to music with a fluffy blanket. Direct me to take a walk with a familiar member of staff around the courtyard, concentrating on my breathing. Use the swiss ball to hug tightly for 10 second and then relax, repeat. Follow my 5 deep muscle exercises. Hand massage 	<ul style="list-style-type: none"> Staff to sit closely next to me to provide deep pressure Staff to co-regulate with me through deep, controlled breathing Give me ice cubes to put on my neck and wrists Give me a swiss ball to throw at the wall (in a controlled environment) Remind me I am safe and staff are here with me. 	<ul style="list-style-type: none"> Reconnect with me through a simple activity – listening to music together, reading a book to me, mindful colouring, walking. Co-regulate with me; breathing, posture Utilise my cool down box; calming smells, hand creams, fidgets to help me ground myself. Take a shower/ bath Complete personal care Relaxation; progressive muscle








Autonomy!



- Empowerment
- Personalisation
- Ownership of progress
- Decision-making
- Self advocacy

Transforming lives together

> Things to consider

-  Cognitive level
-  Timing of sessions
-  Trigger risk
-  Personal stories
-  Review

Using an Arousal Curve Plan



Ways to use an arousal curve plan



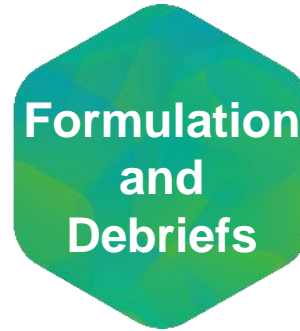
Education

- About own changes to communication
 - About own communication style
- Could lead in to more education on polyvagal theory
- Explicit links between presentation and strategies



Least Restrictive Practice

- Be aware of subtle changes to communication
- Intervene with the right strategies at the right time
- Avoid the need for restrictive practice



Formulation and Debriefs

- Consider precipitating and perpetuating factors
 - Strategies may be a protective factor
 - Can be reviewed in debriefs to add or remove strategies
- Identify interventions needed



Handovers

- New placements
- New staff members
- Family and friends
 - Desensitisation through repeated exposure

Questions?

References:



thank you!