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THROUGH SENSORY PATHWAYS

**Preventing and Healing Trauma While
Building Relationship**

**Resilience as a Neurological
Process**

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ATTACHMENT & RESILIENCE

- **ABOUT ATTACHMENT**
- **ABOUT RESILIENCE**
- **MINIMIZING STRESS RESPONSES - Learning from our Past**
- **DIR / FLOORTIME - STANLEY GREENSPAN**
- **SENSORY ISSUES / STRATEGIES / BUFFERS**
- **FOUNDATIONS OF MATURITY**
- **TRAUMA - WHAT IT IS AND WHAT IT DOES**
- **TRAUMA RISK FACTORS, FIRST AID, PREVENTION,**
- **SENSORY ENRICHMENT, SENSORY AWARENESS, SENSORY CALMING**
- **SOMATIC EXPERIENCES AND SENSORY THERAPIES**
- **THE POWER OF COMMUNITY**

ATTACHMENT - WHAT IS IT?



- RECOGNITION

The kids who need this connection the most are most often the kids that we have a hard time feeling connected to. Sit them in the front, give them jobs to do, check in with them.

- COMMUNICATION

- RELATIONSHIP - YOUR INNER CIRCLE

RESILIENCE

Resiliency is the ability to overcome challenges of all kinds—trauma, tragedy, personal crises, life problems—and bounce back stronger, wiser, and more personally powerful.

Factors in Resilience

A combination of factors contributes to resilience. Many studies show that the primary factor in resilience is COMMUNITY; having caring and supportive relationships within and outside the family. Relationships that create love and trust, provide role models and offer encouragement and reassurance help bolster a person's resilience.

Several additional factors are associated with resilience, including:

- The capacity to make realistic plans and take steps to carry them out.**
- A positive view of yourself and confidence in your strengths and abilities.**
- Skills in communication and problem solving.**
- The capacity to manage strong feelings and impulses.**

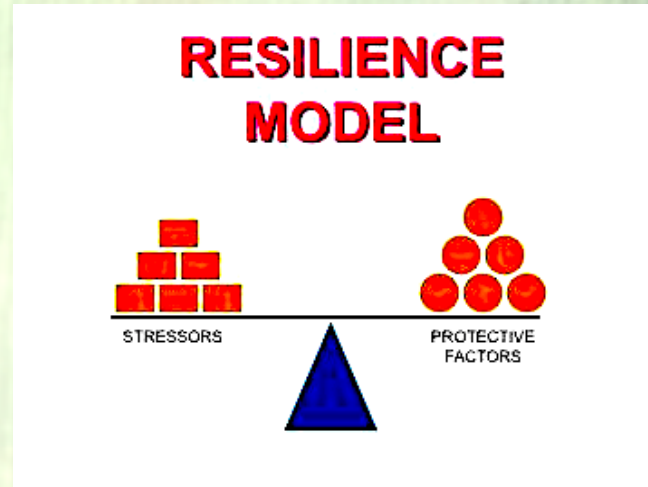


All of these are factors that people can develop in themselves.

- People with resilience meet the world with gusto and exuberance, they are open and spontaneous**

RESILIENCE

A BALANCING ACT



On a river, you may encounter rapids, turns, slow water and shallows. As in life, the changes you experience affect you differently along the way.

In traveling the river, it helps to have knowledge about it and past experience in dealing with it. Your journey should be guided by a plan, a strategy that you consider likely to work well for you.

Perseverance and trust in your ability to work your way around boulders and other obstacles are important. You can gain courage and insight by successfully navigating your way through white water. Trusted companions who accompany you on the journey can be especially helpful for dealing with rapids, upstream currents and other difficult stretches of the river.

You can climb out to rest alongside the river. But to get to the end of your journey, you need to get back in the raft and continue.

RESILIENCE STRATEGIES

Make connections.

Avoid seeing crises as insurmountable problems.

Accept that change is a part of living.

Move toward your goals.

Take decisive actions.

Look for opportunities for self-discovery.

Nurture a positive view of yourself.

Keep things in perspective.

Maintain a hopeful outlook.

Take care of yourself.

Additional ways of strengthening resilience may be helpful.

The key is to identify ways that are likely to work well for you as part of your own personal strategy for fostering resilience.



BEING FLEXIBLE & BALANCED



Resilience involves maintaining flexibility and balance in your life as you deal with stressful circumstances and traumatic events. This happens in several ways, including:

Letting yourself experience strong emotions, and also realizing when you may need to avoid experiencing them at times in order to continue functioning.

Stepping forward and taking action to deal with your problems and meet the demands of daily living, and also stepping back to rest and reenergize yourself.

Spending time with loved ones to gain support and encouragement, and also nurturing yourself.

Relying on others, and also relying on yourself.

LEARN FROM YOUR PAST



Consider the following:

What kinds of events have been most stressful for me?

How have those events typically affected me?

Have I found it helpful to think of important people in my life when I am distressed?

To whom have I reached out for support in working through a traumatic or stressful experience?

What have I learned about myself and my interactions with others during difficult times?

Has it been helpful for me to assist someone else going through a similar experience?

Have I been able to overcome obstacles, and if so, how?

What has helped make me feel more hopeful about the future?

RESILIENCE BUILDING BUFFERS

sense of humour
sensory/motor and
sensory diet strategies
internal control
social supports
cultural connections

schedules/routines
praise participation, not
product

adequate sleep
positive self talk
positive outlook
physical fitness
calming options
self esteem

expect the best, be
prepared for worst
ability to hope



SENSORY ISSUES



Sensory Sensitivity

Children may over-react to bright lights, loud noises, light touch, too much movement around them, change, high energy

These children need calm sensory retreats, and permission to get sensory reduction when they need it.

These children love predictability and routine, have a picture schedule and make life predictable.

Give warning before changes, transitions, novel events, stimulating environments

Dim the lights, seek shade, use music and drumming backgrounds

Nature sounds, running water, keep touch firm - snuggle and squeeze

Don't force eye contact, focus on listening and repeating back

Visuals will get processed before words

Sensory Seeking

Allow movement, become partners in providing intensity and safety

Use worry beads, clay, plasticine, beeswax

provide foods that are very crunchy and very chewy, try tangy, spicy, healthy dips

provide oomph to water by adding ice, lemon, mint, essential orange oil

avoid sugar which disrupts natural cycle of energy ebb & flow

Don't force eye contact, focus on listening and repeating back

Visuals will get processed before words

SENSORY ENRICHMENT

GROUNDS ENERGY - SUPPORTS RELATIONSHIP

- **Movement**
- **Touch**
- **Visual**
- **Auditory**
- **Smell/Taste**
- **Pressure/Heavy Work**



RESILIENCE IN KIDS

Mental Rehearsal - The Social Story Enhanced

Neurons can be activated by mental rehearsal, just as by activity

Imagine as many details as possible, with desired performance and outcomes

Experience Thoughts and Feelings so the body perceives it as reality

Rehearse in advance to build skill and confidence.

Rehearse (after difficult situations) what you would have done differently, to weaken negative pathways

Positive Self Talk

I am calm and relaxed

I can do this!

I can! I can!

I remember what it feels like to be calm

I can handle it!

Build positive talk into your interactions

Do your own positive self talk so the child can hear

Talk about the feeling of accomplishment and how it feels to be done.

Positive self talk must be honest



Visual Imagery "The Safe Place"

Introduce after relaxation and after enjoyable activities

Find that special place (It does not have to be calming for YOU)

Describe and explore in a calm, positive voice. Give it a simple name

Make it multi-sensory (add smell, sound, touch, movement, visual)

Reinforce and Practice. This is key in activating parasympathetic system and coming down from RED ZONE

DEVELOPMENTAL MATURITY

FOUNDATIONS FOR DEVELOPMENT OF PRO-SOCIAL CITIZENS



- **Valuable** - Children need to learn that they are precious and valuable just for being. They must learn that all people have the same worth, just for being. We do not earn our value, we are born with it. Some children cope by feeling worth less than everyone else, while others cope by acting as though they are better than anyone else, and more important.
- **Protection** - Children need to learn that they are vulnerable and that we all deserve and need protection from time to time. They should not have to feel responsible for our adult problems, and they should not learn that their safety does not matter. Some kids learn to become enmeshed with the problems of adults around them, while others adapt by putting up walls and being indifferent, if their needs have not been attended to.
- **Sense of Reality** - Children should learn that we are all **EXPECTED** to be imperfect. We don't want them to feel that they must always be perfect to save the day, nor should they be held to such high standards that they take on the role of "bad and rebellious" out of defiance.

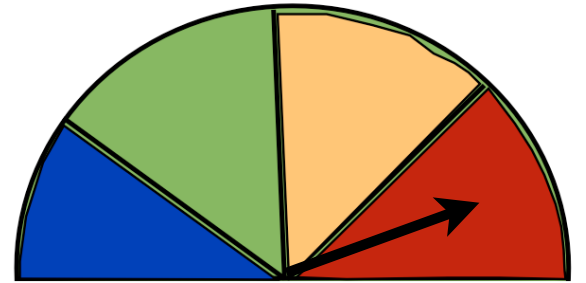
DEVELOPMENTAL MATURITY

FOUNDATIONS FOR DEVELOPMENT OF PRO-SOCIAL CITIZENS



- **Inter-Dependence** - A Child must learn that their needs and wants matter, that they deserve being cared for. When healthy dependence is not supported, some children will want nurturance at all costs, and create dependency needs that harm relationship. Others will be anti-dependent and will deny their own wants and needs, trying to be needless and hyper-independent. Children should receive the care and help they require and also have practice giving nurturance to others and other life forms.
- **Being Spontaneous & Open, but Moderate** - Children need a lot of practice just being who they are and exploring and enjoying life. Practice, in nurturing settings, helps children learn that they can be open and fun, while still being in control of themselves. This requires freedom with boundaries. Some children lose control without boundaries, others manage life by learning to control others to get what they want, and neither extreme leads to satisfaction.

What is AROUSAL?



Heartbeat

Respiration rate

Temperature

The Stress Response System works the same way if the AROUSAL is caused by Danger, Cognitive Stress, FASD, Trauma, ASD, Learning Disability, Sensory Overload, etc. etc.

Signaling, crying, restlessness

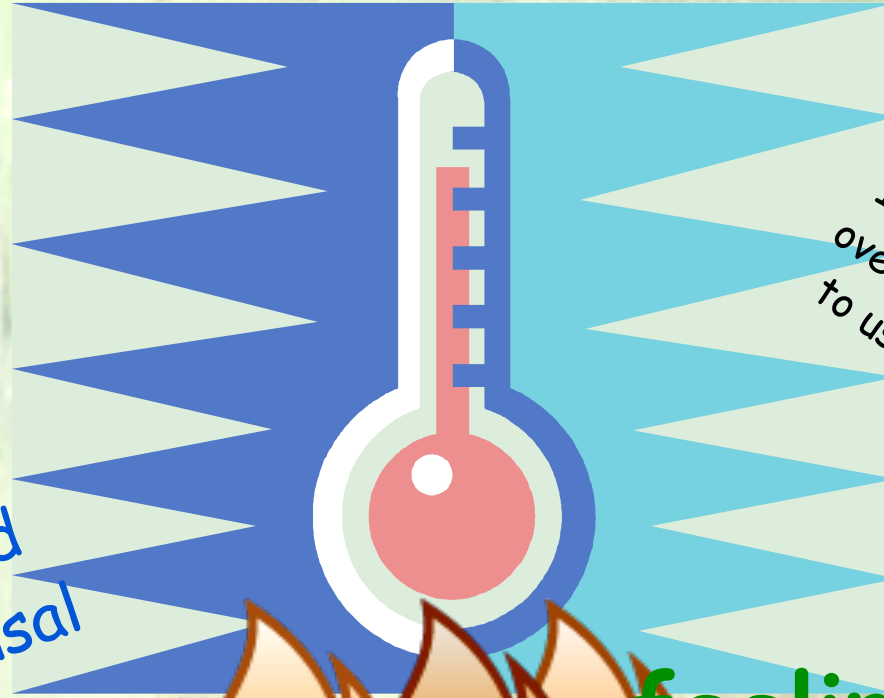
Hyperalert states

Diffuse motor activity

Factors in AROUSAL

Sensation and Emotion are neurobiologically hard wired together and affect thinking
(reticular system, amygdala, locus coeruleus, etc.)

Is it sensory?
YES!
sensory overload
increases arousal



Is it emotional?
YES!
Increased emotions lead to
over-arousal, make it harder
to use cognition to balance
out.

sensation

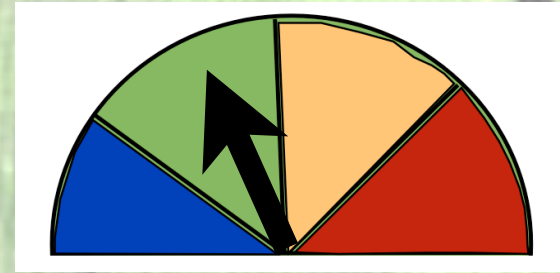
feeling

Is it cognition?
YES!

thinking

We can think ourselves into a frenzy!

We retrieve memories and formulate action plans according to the level of arousal of our body.



Gray zone level of arousal connects with memories and responses from other lethargic and mellow situations from the past.



Green zone level of arousal connects with memories and responses from other calm and alert situations from the past.



Red zone level of arousal connects with memories and responses from other agitated and frazzled situations from the past.





Stress Response System

(primarily sympathetic activation)

Activation leads to: shutting off frontal areas, increased peripheral awareness, increased limbic activation, release of stress hormones.

Panic leads to hyper-arousal and loss of any cortical control or influence.

Dissociation is the most primitive response ("freeze") and occurs around the brainstem level, joins stress response and surrender.

Stress Hormones cause us to focus on body, environment, time with a very self-centred orientation. This is survival mode. Attention and impulse problems can be the result of change in organization of neural networks. Initially these would most often support survival, but not when repeatedly activated post-trauma.

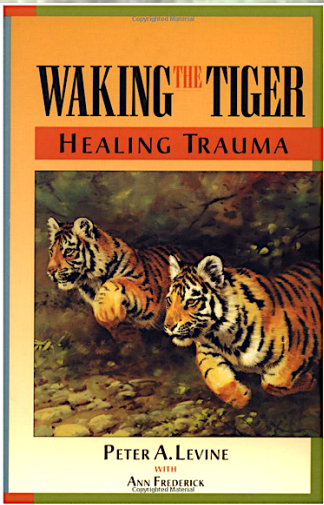
"Developmental trauma" - A few minutes of stressful experience early in life can change a rat's stress response system forever. Everyone's stress response system is unique, influenced by individual experiences.

Dissociative and hyper-arousal pathways can become overactive and sensitized, affecting one long after initial trauma. When this happens, it looks just like hyperactivity, ADD, Oppositional Defiant Disorder, coloured by a desperate need to be in control.

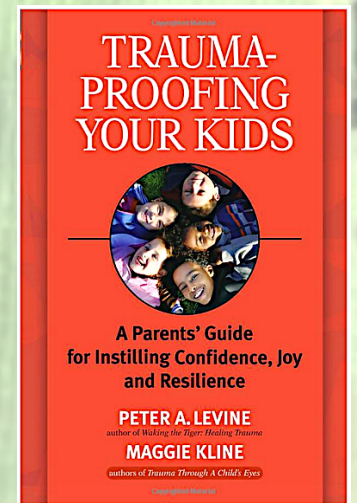
In humans, stress system can be triggered by thinking.

Stress response can be modulated by presence of familiar people, humour, and play. Oxytocin is an anti-stress chemical, if not mis-interpreted.

Chronic loss of control leads to paralyzing fear, a form of learned helplessness.



What is TRAUMA



Trauma is not the event that caused it.

Trauma is the reaction to it, which becomes embedded in the nervous system and affects all aspects of being.

Trauma is caused by an immobility response (“freeze”) which prevents the dissipation of shock and causes one to feel overwhelmed, frozen in fear, long after the causal event is over.

A breach in the stimulus barrier leading to overwhelming helplessness (Freud, Lectures, and Beyond the Pleasure Principle, International Psycho-Analytic Press, 1922)

Causes of Trauma

Sexual Abuse or Assault

Emotional Abuse/Psychological Maltreatment

Serious Accident or Illness/Medical Procedure

Victim/Witness to Community Violence

Natural or Manmade Disasters

War/Terrorism/Political Violence

Victim/Witness to Extreme Personal/Interpersonal Violence

System-Induced Trauma: Traumatic removal from the home, traumatic foster placement, sibling separation, or multiple placements in a short amount of time.

(Adapted from National Child Traumatic Stress Network, 2008)

http://www.nctsnet.org/nctsn_assets/pdfs/CWT3_SHO_Definitions.pdf)

Physical Abuse or Assault

Neglect

Witness to Domestic Violence

School Violence

Forced Displacement

Traumatic Grief/Separation

In the mind of a child, ANYTHING “less than nurturing” can create trauma

Symptoms of Trauma

c-HyperArousal

- 1-Helplessness/freezing**
- 1-Constriction**
- 1-Dissociation/flashbacks**
- 2-sensory sensitivity**
- 2-hyperactivity**
- 2-exaggerated emotions**
- 2-extreme startle**
- 2-night terrors/poor sleep**

2-mood swings (rage/shame)

2-stress reactions

3-can't Learn

(can't synthesize new information)

3-traumatic coupling

3-traumatic anxiety/panic

3-psychosomatic symptoms

3-denial

3-regression

3-sexualized behaviour

3-withdrawal from social situations

3-clinging to safe adult and more...

From Peter Levine, Waking the Tiger softcover pages 127-153

Unconscious hyper-arousal reactions result in additional symptoms:

increased heartbeat
shallow breathing
tight stomach muscles

cold/clammy/sweaty
altered muscle tone
perpetual high arousal state

WHAT TRAUMA DOES?

- **Mammals, after trauma has passed, release the pent up energy that would have resolved the trauma. To avoid embedding trauma in our spirit, we must “shake it off”, using up the excess energy (from defense mode) to prevent a ‘body memory’ being formed**
- **Children, who do not have the ability to fight or flight, automatically go into “freeze” or “collapse” as their default. When mobile, their tendency is to “run toward” a caregiver figure. If this cannot help them ‘release’ their energy, it becomes frozen.**
- **Trauma affects us through neurological shaping and pruning, underscoring how crucial the safety and containment provided by the adult can be in nurturing healthy growth and preventing negative imprints. Imprinting that happens as a result of trauma is like an e-mail message rated “urgent” and will drown out other messages.**

TRAUMA RISK FACTORS

- **Most at risk are unborn babies, newborns, and very young children. It is a myth that they will not remember or be affected, even if they are too young to store a memory in the brain.**
- **Next highest “at risk” are those with developmental, sensory, neurological disabilities who are ‘more sensitive’ or less mobile.**
- **Level of shutdown is #1 major factor. A child who can run to a caregiver will be less impacted than a child that freezes and blocks out the world.**
- **Residual Survival Energy, originally mobilized to fight or flee is #2 major factor. (The more energy generated, the deeper it will run.)**
- **Damage can be mitigated by consistent, patient support to release the highly charged state and return to healthy, flexible functioning.**

TRAUMA FIRST AID

- **Adult MUST be calm and grounded. Trust that your child, though fragile, is also resilient, when supported.**
- **Protection from a safe adult is what the child needs**
- **Nurturance, Respect, Boundaries (need security, warmth, tranquility)**
- **Comfort & Safety of a stuffed animal, doll, angel, fantasy character, especially important when separated from primary caregiver. Can also be effective sleep aids**
- **These prevent “overwhelm”**

FIRST-AID FOR TRAUMA

PREVENTION

IN ORDER OF USE

signs of shock:
glazed eyes
pale skin
rapid or shallow pulse or breathing
disorientation
overly emotional
overly tranquil

“you’re still shaken up it’s important to stay still for a while”

- + Check your own body’s responses first. Breathe, feel your body, accept**
- + Assess the situation. If there are signs of shock, keep child still for a while**
- + As the shock wears off, guide your child’s attention to his sensations; “How do you feel in your body?” mirror back the responses and questions and move over the body**
- + Slow down and follow your child’s pace by careful observation of changes Allow pauses and silence. You will see signs when a cycle is finished; wait a bit to see if a new cycle will start.**
- + Keep validating your child’s physical responses. Don’t try to stop the child’s reactions “That’s OK, let the scary stuff shake out of you”**
- + Trust in your child’s innate ability to heal. “stay with” don’t move or control, look for orienting**
- + Encourage your child to rest even if she doesn’t want to. Down time is essential for completion.**
- + The final step is to attend to the child’s emotional responses and help him/her make sense of what happened Use love, attachment, assurance. Make sure child accepts own reactions**

TRAUMA FIRST AID

Tip to help with an anxiety attack

- Look around you.
- Find 5 things you can see, 4 things you can touch, 3 things you can hear, 2 things you can smell and 1 thing you can taste.

This is called grounding. It can help when you feel like you have lost all control of your surroundings.

TRAUMA PROOFING IDEAS

VIA SENSORY PATHWAYS

TRUST THE EARTH ☯ TRUST YOUR BODY



- **Rebounding from shocks, losses, stressful events develops strength, resilience, vibrancy**
- **Allow a moment for your mind and body to settle. Breathe, Don't freak out! Your composure is powerful. What your face/body communicate are major factors in trauma depth**
- **Breathe from your belly. Be the willow that accepts what comes, yields and flows with it, and returns to its centre**
- **Pay more attention to your body than your mind. Practice noticing what your body feels in different situations (with acceptance). As you (your child) become more able to tolerate more sensation with acceptance and not stress, you (they) become more fully able to experience fuller emotions (even more pleasure and joy as well as the negative) Sensation is the root, awareness the key, change and flow are the constant. If you pay attention to a sensation long enough, it will change or shift, and this is healing.**

TRAUMA PROOFING IDEAS

VIA SENSORY PATHWAYS

BODY-BRAIN CONNECTION 🌙 TRIUNE BRAIN

Triune Brain

Neocortex - Complex thinking - Words are it's language

Limbic System - Processes Memories & Emotions - Feelings are it's language

Brainstem - Survival & Regulation - Sensation is it's language

Secrets of the Triune Brain (from the brainstem level)

- 🌙 **The language of sensation is a foreign language to us, we generally only process the emotions that result from the processing of sensation.**
- 🌙 **Increasing sensory awareness enhances a deep instinctual awareness of our survival systems, and this is necessary to really support children dealing with overwhelm and stress.**
- 🌙 **Notice all sensations. Include: temperature, pressure, touch, vibration “butterflies”, tension, constriction, openness, trembling, tingling, heat, heaviness, lightness, rotating sensations in gut**

BODY-BRAIN CONNECTION

THE LANGUAGE OF THE BODY - SENSATION NOTICING SENSATIONS

- ☉ **Mindfulness as a baseline. Find some quiet time and place to notice sensations: heart, breathing, muscles, skin, temperature. Do this in different body areas. Now include a scan of thoughts and mental pictures. Eventually, be able to do this in context. For example, driving to the lake for a family day, what does this bring up in your body.**
- ☉ **Now imagine a rude driver cutting you off and nearly causing a crash while yelling at you. Notice the changes in sensation in different areas. Notice what you feel like doing or saying, or do you just feel stunned? These are your basic survival experiences, in the language of the brainstem.**
- ☉ **Take a little time to notice the activation settle down, visualizing the snow settling in your snow globe. Be still and calm, know you are safe. Stop from re-playing the image by looking around the environment and noticing things. **Adjust Mental Rehearsal****
- ☉ **Try to be grounded on the earth and notice things that bring you peace or joy. (sky, trees, rocks, clouds, river, loved one, picture) Now notice how you feel in your body at this moment.**

BODY-BRAIN CONNECTION

THE VOCABULARY OF RESILIENCE = SENSATION

PAYING MORE ATTENTION TO SENSATIONS THAN EMOTIONS

- **Through exercises like this, and in daily life, try to notice the sensations before shifting into emotions - honour your survival system - honour how the pure world touches you**
- **This is the foundation of self regulation, the ability to notice the sensations (sensory feelings) within you as they change. As this develops, you will learn when and how to shift sensations that get stuck.**

Building a Sensation Vocabulary

⊗ cold/warm/hot/chilly ⊗ twitchy/butterflies ⊗ sharp/dull/itchy
⊗ shaky/trembly/tingly ⊗ hard/soft/stuck ⊗ jittery/icy/weak
⊗ relaxed/calm/peaceful ⊗ empty/full ⊗ dry/moist ⊗ flowing/spreading
⊗ strong/tight/tense ⊗ dizzy/fuzzy/blurry ⊗ numb/prickly/jumpy
⊗ owie/tearful/goose bumpy ⊗ light/heavy/open ⊗ tickly/cool/silky
⊗ still/clammy/loose

Sensations are different than emotions, they are physical and bodily. A non-verbal child who seems frightened can be invited to point to where in the body they may feel shaky or numb, or where the "owie" is.

THE BODY'S NATURAL RHYTHM



CONTRACTION-EXPANSION LIFE IS PENDULATION



Maintaining/restoring pendulation (the natural human rhythm) is the key to resilience

Breathing as Example: Pay attention to the pressure and flow of air in and out of lungs and belly as you inhale and exhale. Is there tightness or free-flow through nostrils, throat, chest, belly. Are inhale/exhale even or is one shorter? Are there pauses between inhale and exhale? If so, how do they feel? Do muscles tense and relax as you breathe?

As breathing is a great way to understand pendulation, it is also a great way to support and restore it.

This natural ebb and flow permeates our whole being; we are always moving between the two, and this allows us to take in the fullness of the world. Every contraction/tightness/negative energy is followed by expansion/relaxation/positive energy, unless we allow ourselves to be or remain stuck. No matter how bad a feeling is, your resilience will allow it to shift and change, if you restore the pendulation. When bad feelings do not readily go away, they are usually associated with trauma or significant stress. If we are defeated and frozen in helplessness, natural pendulation is diminished and may need to be supported to get going again. When pendulation or resilience is shut down, we cannot access the mechanisms that let us regulate mood, vitality, and health.

Pendulation is how the body knows that what you are feeling is temporary and will change! As we support children to flow with their rhythm and notice the change, we prevent trauma from freezing our resilience.

THE BODY'S NATURAL RHYTHM

CONTRACTION-EXPANSION
LIFE IS PENDULATION

Pendulating between Pleasant and Unpleasant Sensations, Emotions & Images is the KEY to:

being balanced, preventing trauma, healing trauma

This can be experienced as a natural rhythm of contraction and expansion, one ALWAYS following the other. Pay attention to the pressure and flow of air in and out of lungs and belly as you inhale and exhale, and your body will understand pendulation.

Exercise: Exploring Sensation and the Rhythm of Pendulation (24)

Tracking Sensation With a Partner (27)
Language of Sensation

Making a Sensation Treasure Chest (29)

TRAUMA-
PROOFING
YOUR KIDS



A Parents' Guide
for Instilling Confidence, Joy
and Resilience

PETER A. LEVINE

author of *Waking the Tiger: Healing Trauma*

MAGGIE KLINE

authors of *Trauma Through A Child's Eyes*

THE LANGUAGE OF SENSATION

**AVOID 'YES'-'NO' QUESTIONS OPEN ENDED QUESTIONS FOSTER CURIOSITY
GO SLOW, PAUSE OFTEN. "QUIET WAITING" IS WHEN THE BODY BEGINS TO SPEAK TO US**

open ended



**What do you notice in your body now?
Where in your body do you feel that?
What are you experiencing now?
As you pay attention to that sensation, what happens next?
How does it change?**

**What else are you noticing?
Would you be willing to explore how your body might want you to move?
Would you be willing to focus on that feeling with curiosity about what might happen next?**



explore details



**What are the qualities of that sensation?
Does it have a Size? Shape? Colour? Weight?
Does it spread? Notice the direction as it moves.
Does the (pressure, pain, warmth, etc.) go from inward to out or the opposite?
Do you notice a centre point? an edge? Where does the sensation begin and end?**

**What happens next? (Ask even if person reports feeling stuck)
As you follow that sensation, where does it go? How does it change?
Where does it move to, or want to move to if it could?**

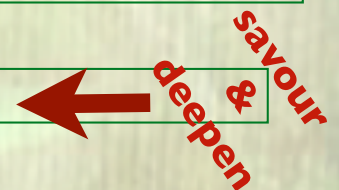


movement through time



**When you feel that, what happens in the rest of your body?
When you feel that in your (body area), how does it affect you now?**

Allow yourself to enjoy that (warm, expansive, tingly, etc. sensation as long as you'd like.



Making a Sensation Treasure Chest

- Find and decorate an empty box, can, bag
- Select items with very different textures (feather, sandpaper, different size rocks, cotton ball, slimy toy, satin or silk, steel wool...be creative!
- Eyes closed or blindfolded, have child reach in and touch one item and guess what it is. For younger kids, match to item in view or to picture.
<http://www.sensationgame.com/>
- Then have child touch each item to skin and tell you as much as possible about how it feels
- Have child hold items of very different weight and tell you how muscles in that area feel different (harder, softer, tighter, relaxed, etc.)
- Have child tell you how he feels different in his body when he touches something slimy, wet, hard, etc.
- Make a list of sensations you have explored, discovered, felt
www.sensationgame.com
- Try a Sensation Tray for exploring taste sensations and textures in mouth

RESILIENCE - SENSORY FLOW

- You and your child are learning that sensations (pleasant and unpleasant) have one thing in common - they always change and move.
- Practice with sensation helps the body to learn this, and gives the child confidence when difficult sensations occur.
- Bad things happen, but trauma can be prevented or transformed by allowing the body to experience and shift
- Being part of having a bad sensation transform is very empowering to the child, building confidence and resilience that lasts a long time, often a lifetime.

NEUROPLASTICITY

DEVELOP HABITS & EMOTIONAL PATTERNS



- **Synaptogenesis** - We develop new synapses when we engage in new actions. When we repeat actions, the synaptic pathway gets larger and easier to trigger. This is how we develop new habits, strengthen habits, and break habits
- **Neurotransmitters** - Every emotion that we experience results in a specific neurotransmitter, which then stimulates receptors (for that transmitter) to grow on neurons throughout the body, producing a “craving” for that emotion, which then gets replayed to satisfy the craving. Some cells stop producing receptors for nutrition to build more receptors for emotion based neurotransmitters
- **Emotions/Addictions** - Require new synapses to be built and practiced. This takes time and may not be comfortable. “Fake it till you make it” helps a lot, as well as **role play** and **rehearsal**. When **thoughts** and **emotions** match, the brain perceives it as reality and builds a wider pathway. Use **stories, plays, movies, heroes** to explore this and **feel the feelings**.

POSITIVE NEUROTRANSMITTERS

- **Triggering the release of positive neurotransmitters helps to increase the receptors for them, creating more opportunities for joy!**
- **Serotonin is released when you do what makes you happy**
- **Dopamine is released when you do what you are good at**
- **Personally meaningful**
- **Self-Awareness - Notice your emotions and how your body feels**



SOMATIC EXPERIENCING

TRUSTING YOUR OWN INNER WISDOM

- Trauma leads to dissociation, leads to people being out of touch with their bodies
- **We need to support each other in learning to notice what our bodies are telling us**
 - **arms tight - body wants to strike out**
 - **legs tight - body wants to flee**
 - **body relaxes when in tune with surroundings/thoughts (Describe)**
 - **body tightens when in conflict with surroundings/thoughts (Describe)**
- Focusing and SE can be used in self awareness and decision making

SE - somatic experiencing or paying attention to the body



INCREASING SELF AWARENESS



- Time in Nature
- Walking
- Yoga
- Meditation
- Breathing
- Music/rhythm/
drumming
- Crafts
- Massage
- Dance
- Socializing
- Reading
- Ritual/Ceremony
- Story Telling
- Working with Earth
- Keep a Dream Log
- Journal
- Art
- Be Self Aware **WHILE**
doing!

CALMING THE BRAINSTEM



- calm music
- nature sounds
- dim light/natural light
- blue light
- neutral warmth
- deep breathing slow down exhale
- aromatherapy
- wall colours
- art - own your place
- positive reflections
- family wall
- rocking chair/swing

MINDREADING - EMPATHY

- **make a greater effort around kids to exaggerate physical expressions (facial, gestures, etc.)**
- **Use more vocal intonation, change volume, pitch, tone**
- **Reference children's bodies when communicating**
(Your body is telling me you are not interested, your face tells me you feel surprised, your feet tell me you are restless)
- **People-watching, in books, on TV, play "name that emotion"**
- **Teach "Other Awareness" every day!**
- **When you use more energy on this, you will feel more energy**



COMMUNITY

RITUAL - TRADITION - LISTENING



- **Talking Circles / Check in Times / Start with small groups**
- **Sensation Games**
- **Mindfulness Experiences / MindUP**
- **Nature**
- **Ritual and Routine are calming and organizing**

SUMMARY

- **Build Connection with Sensory Activities**
- **Build Resilience with Sensory Activities**
- **Build Self Awareness with Sensory Activities**
- **Build Self Regulation with Sensory Activities**
- **Build Interaction skills with Sensory Activities**
- **Boost Sensory Activities in times of Trauma**

BIBLIOGRAPHY

