# Trauma and Performance
## A Neuroexperiential Model: Brainspotting


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- What is performance and performance psychology
- What do we mean by “trauma and adverse life event”
- PTSD and Neurobiology
- Performance and Performace issues
- Brainspotting
- Working with young people and working with adults
- Experiential

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# Performance

- Studies the processes involved in the development of skills, knowledge of performers as well as their execution during a specific event (Aoyagi & Portenga, 2010).

- Performance psychology is a branch of Psychology that studies how performers think, feel and behave to achieve an optimal outcome in their field (Hays,2012).

- Focus on cognitive abilities and cognitive processess and systemic factors associated to high level of pressure and results.

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# Performance

- Most athletes think that the qualities required to achieve success are the “tough ones” such as perfectionism, rigidity, self-discipline, willingness to self-sacrifice, disregarding the fact that the brain also needs soft qualities such as compassion, understanding and flexibility.

- Athletes are typically expected to excel and to achieve results. Often despite the injuries and risks some athletes are exposed to , there is a social expectation that they will shake them off, go back to training and continue to persevere.

- These actions may require extensive preparation and may cause people to experience high levels of stress.

- People who perform at the highest levels must satisfy expectations and demands, demonstrate coping skills, manage their own judgment as well as those of others and deal with the consequences of their own results (Hays, 2009).

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# What is a Traumatic event ?

- In terms of physical injury trauma is an injury or a wound caused by an external force which may cause death or permanent disability.

- In terms of psychological trauma, it is an abnormal event causing profound feelings of fear, anger, devastation and powerlessness/helplessness.

- The individual may be directly OR indirectly involved in the traumatic event. and interfers with the “normal” coping strategies.

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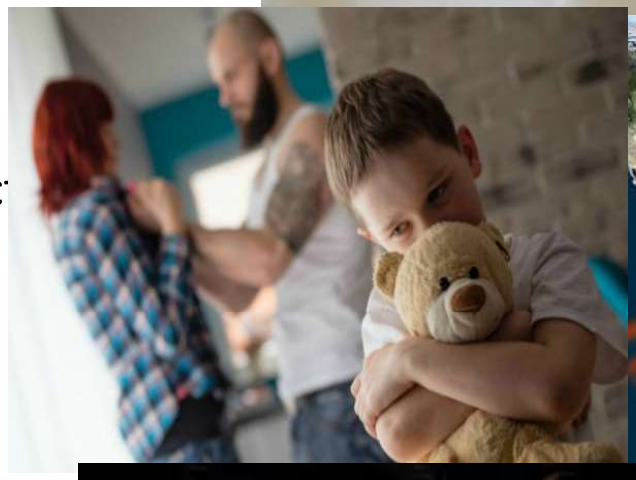
# Types of Traumas

- WAR and Terrorist attack in a conflict-free zone - Torture
- Natural Disasters
- Road Traffic Accident (RTA)
- Rape or Sexual Assault
- Physical, Sexual, Emotional Abuse, Neglec
- Death of a loved one, Losses
- Attempted Murder
- Physical Illness
- Pandemic
- INJURIES (RSTI)
- Humiliation and Bullying
- Mental health issues
- Developmental Traumas
- Epigenetic



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# Trauma: Type1 & Type 2

- Type 1: single traumatic event, “recovery” is faster.
- Type 2: prolonged and repeated exposure to traumatic events. Worse outcome compared to Type 1.
- Type 2:  30-75% higher risk of developing PTSD
- Type 1: 10-20 % higher risk of developing PTSD

(Copeland *et al*., 2007; Dunn et al., 2017; Kessler *et al*., 1995)

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"People who perform have to bring their talent and capabilities into play and show others a self that is different from the daily self" (Hays, 2009).

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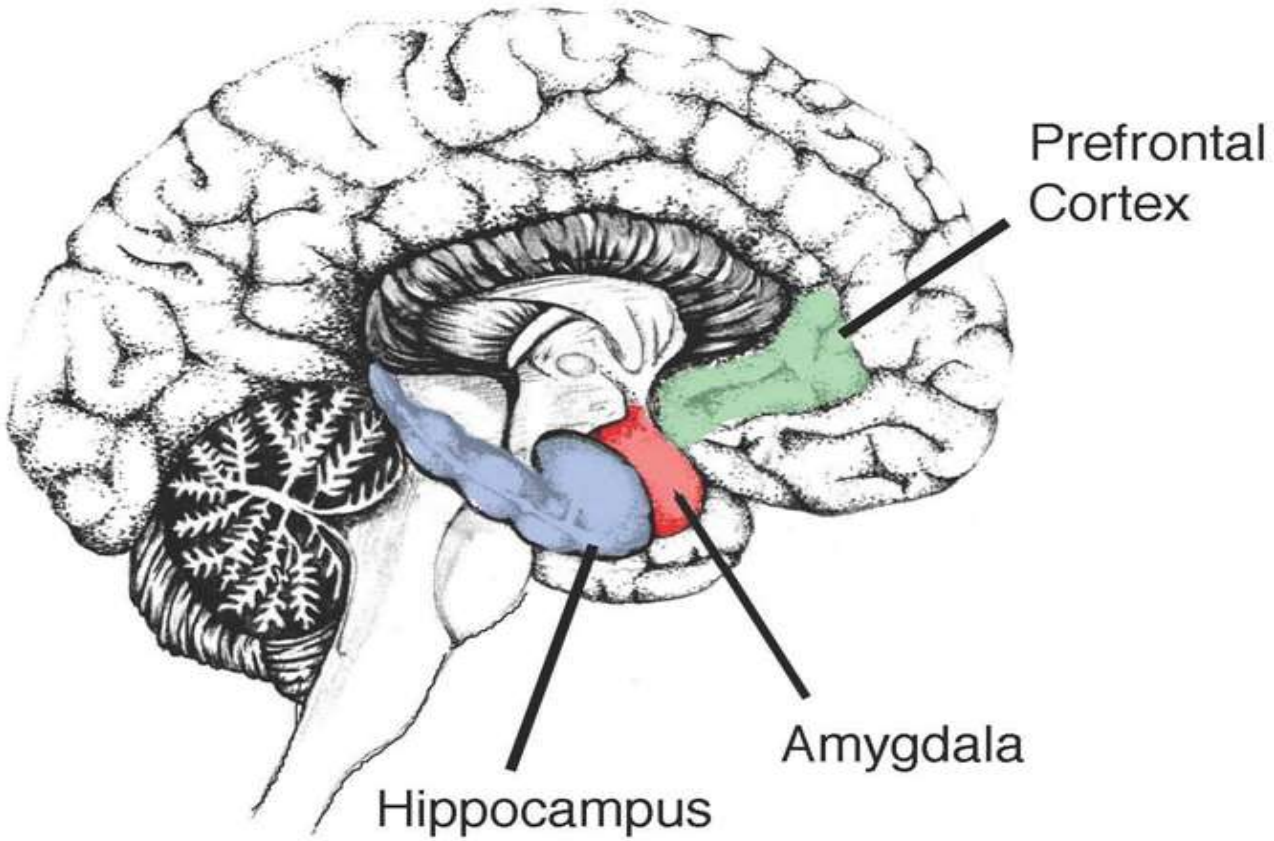
# Neurobiology of Trauma

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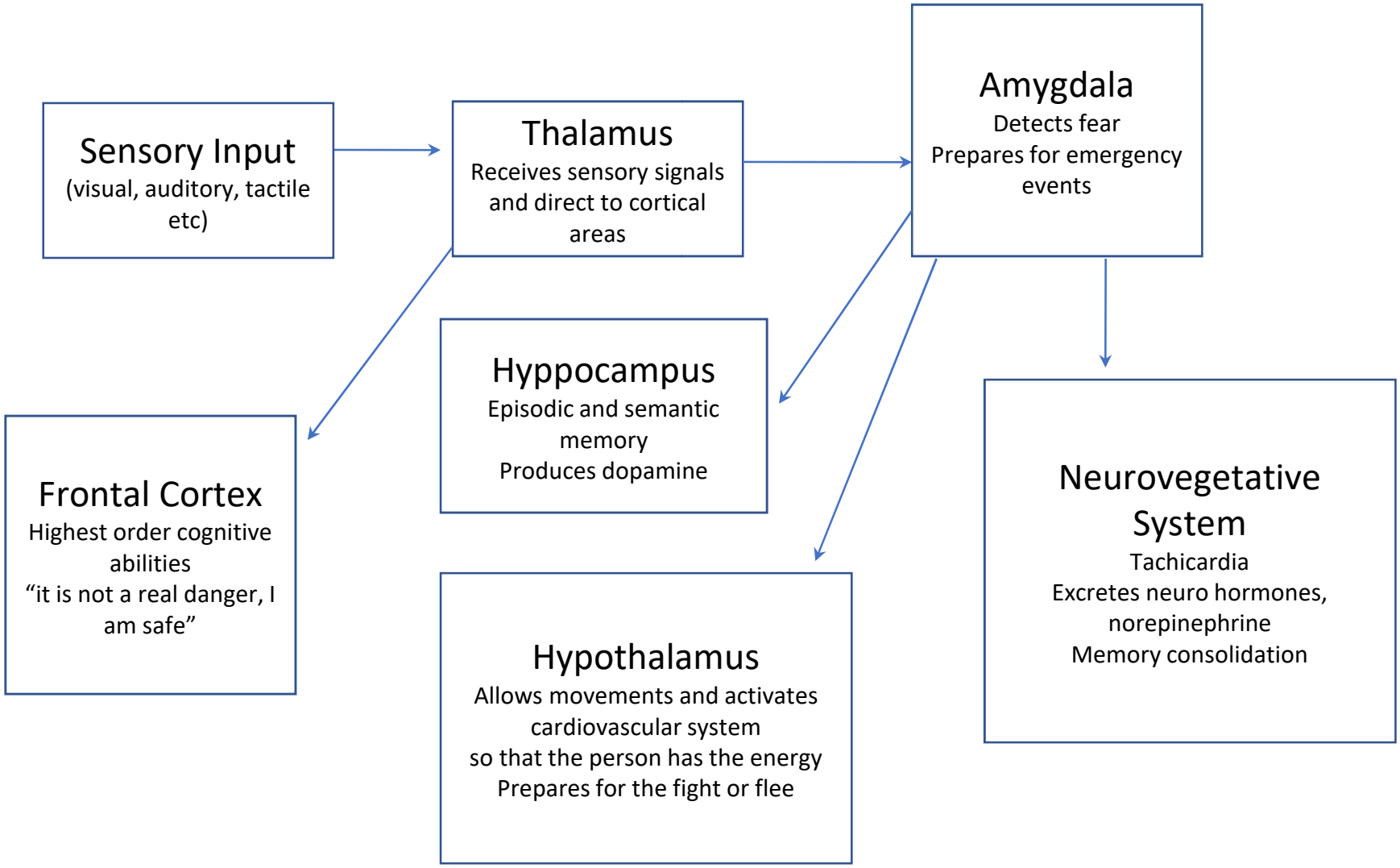
# Neurobiology of Trauma

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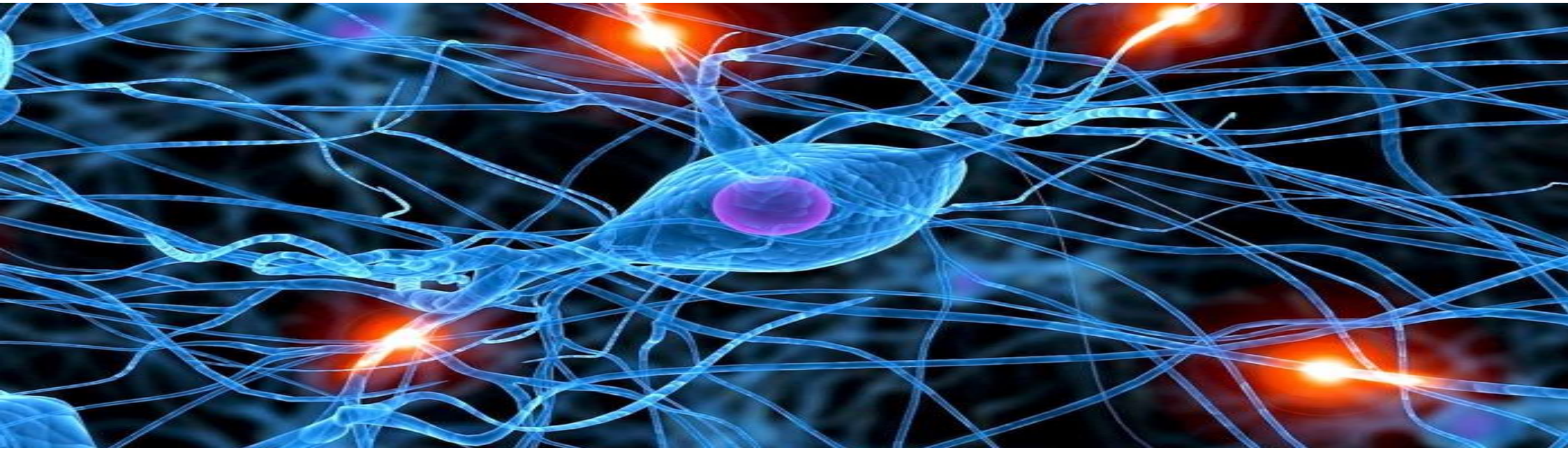

## Autonomic Nervous System

**ANS:** regulates involuntary physiologic processes including heart rate, blood pressure, respiration, digestion, and sexual arousal. It contains three anatomically distinct divisions:

- Sympathetic: Survival mode – fight or flight
- Parasympathetic – Dorsal Vagal: Survival mode – freeze – collapse – dissociation – shut down
- Parasympathetic – Ventral Vagal: affiliation – safety – connection – relational – reprocessing

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# Post Traumatic Stress Disorder: PTSD

(American Psychiatric Association, DSM-V APA ,2013)

- Having experienced/exposure to or having witnessed: death, threatened death, serious injury, or violence .
- Re – living. The traumatic event is persistently re-experienced.
- Sleeping Disturbance.
- Negative alterations in cognitions and mood.
- Intense or prolonged distress after exposure to traumatic reminders.
- Physiological reactivity after exposure to trauma-related stimuli, hyperarousal.
- Persistent Avoidance of distressing trauma-related stimuli after the event.
- Persistence of Sympotms>1month / Delayed onset .

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# Performance Issues

- Anxiety and Phobias
- Blocks
- Difficulties controlling motor skills (tremor, tension, clumsiness)
- Low self-esteem – rumination / negative self-talk
- Anger, Low mood, frustration
- Addiction – Eating Disorder
- Talent development
- Performing better during training compared to competition
- Feeling stuck, unable to plan and progress
- Losing motivation
- Burnout
- Grief and loss
- Somatisation
- Relationship problems
- Excessive criticism-  perfectionism - rigidity
- The Yips (article about BSP in Esquiere) https://www.esquire.com/sports/a44960914/the-yips-sports-performance-mental-health-explained/
- Fear of Judgment and Shame
- Repetitive sport trauma injuries / PTSD

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# The Yips

(Erik Magnuson; former offensive lineman who played through numerous injuries)

"I was trying to stay on the team. I felt like I was under a lot of pressure to be on the field.“

## Brainspotting “Where you look affects how you feel” (David Grand, 2003)

- Discovered in 2003 with a 16 year old figure skater who couldn’t master the triple loop.

- A Brainspot is the activity in the subcortical brain in response to focused activation (SUD: 0-10) and eye position.

- Eye fixation and biolateral sounds.

- Initially developed to treat PTSD. Now used with a variety of mental health problems, performance and coaching.

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# Theoretical Model

- Trauma overwhelms the brain's processing leaving pieces of the unprocessed experiences frozen in time and space.
- A Brainspot is seen as an eye position that correlates with a physiological capsule that holds the traumatic experience in memory form.
- Neuroexperiential model.

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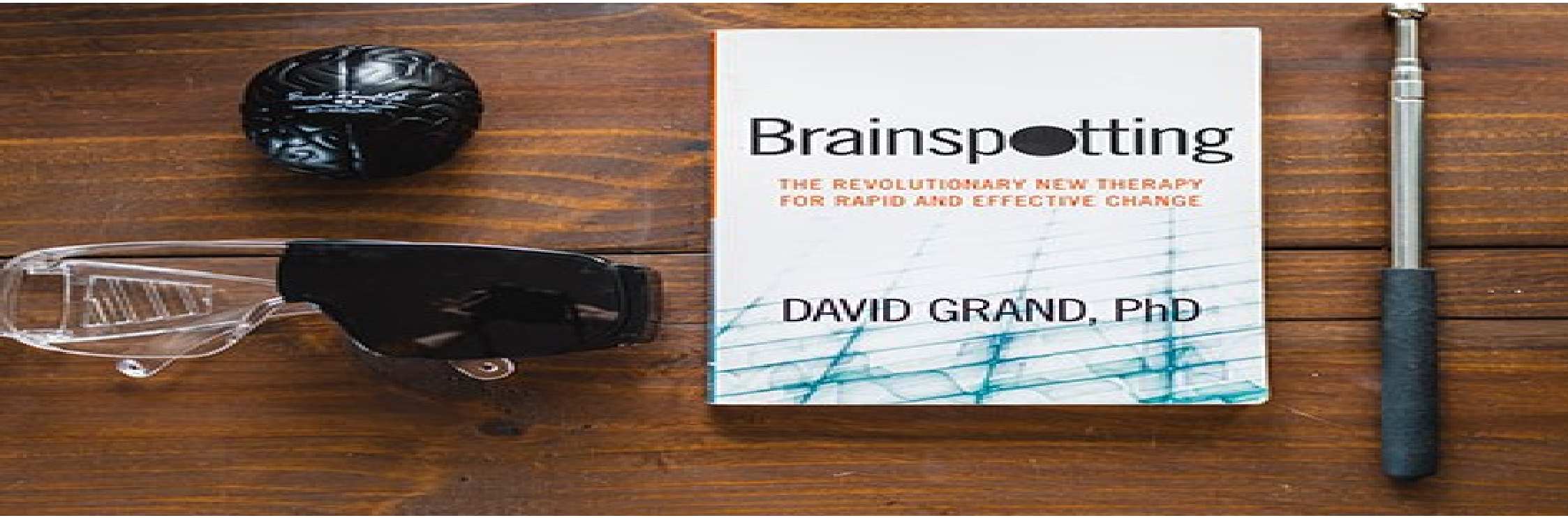


# Brainspotting

- Neurobiological and Relational attunement – the Dual attument Frame
- Head and tail of the comet
- Uncertainty
- Several modalities of accessing a brainspot (inside/outside window BSP, gazespotting, one eye BSP, Resource model.)
- Adaptive and complete resolution
- Expansion Work

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# Performance as a whole brain experience : The F.L.O.W. Model (Alessia Bruno & Ruth Chiles)

- Performance achieves fluidity
- Information are no longer fragmented, but integrated
- We are present and connected to self, to others
- The neocortex and the subcortex work together in synchrony.
- Right and left brain are in balanced
- Neuroplasticity
- Reach a flow state

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# WORKING WITH YOUNG PEOPLE

- Attunement - Attachment: resonance with the inner world of another (Siegel). Interoceptivity-Neuroceptivity

- Creative adaptation: colours, poppets, sands, books, music, toys, play therapy, indoor, outdoor (child-centered)

- Work on resources: pet, positive experience, feeling loved, super heroes

- Systemic Work: managing expectations, adult pressure (parents/coach), adults' unsolved traumas affect young athlete performance, managing health and growth spurt

- Age appropriate challenges and communication

- Sport: Focus on the process and the experience:

it is about  fun!

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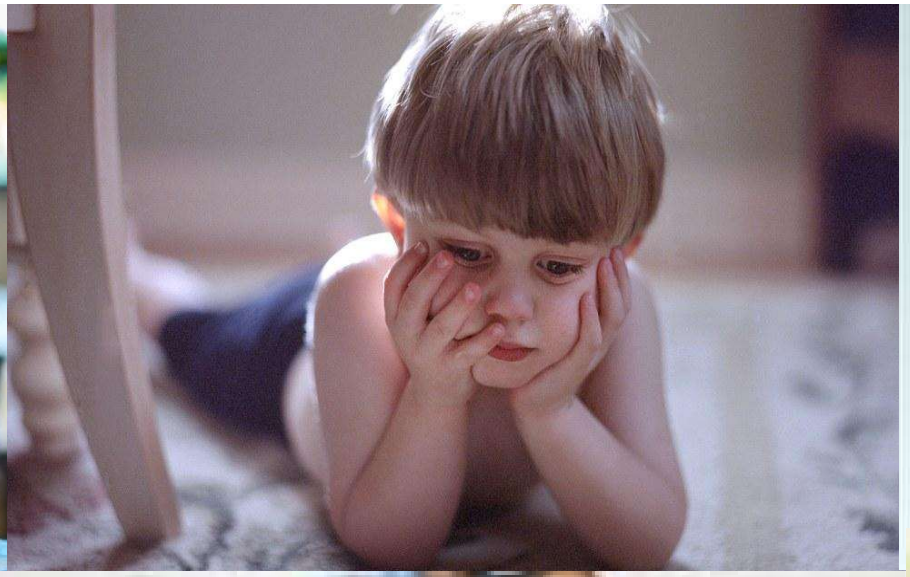




# Gazespotting

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# Thank you!


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