

What is complex trauma?

- Summary of paper (20 mins)
- Time for questions and exploration

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The fear system that cannot switch off

- Trauma is the result of a failure of the biological fear system to switch off once the original threat has passed
- Complex trauma results from a *chronic* failure of the fear-system to switch off which creates dysfunction in a wide range of other systems

My definition of “Fear System”

1. Immobility (metabolic shutdown). **Fear collapse**
2. Heightened Mobilisation (fight-flight). **Fear arousal**
3. The Orienting Response. **Fear alert**

Defining the fear system

- **Fear-alert (orienting response)**
 - Tension – holding breath
 - Heart rate up, startle response activated
- **Fear arousal (fight, flight, freeze and fright)**
 - Heart rate and pumping volume up
 - Glucose released into bloodstream
 - Blood flow to limbs increased - to gut diminished
 - Sweating, dry mouth, goosebumps, focus on danger
- **Fear collapse (immobility)**
 - Brain releases drowsy-making painkillers
 - Vasodilation causes blood pressure drop
 - Metabolic shutdown as energy production disabled at cellular level
 - Cognition and social engagement disabled

How fear system switches off

- The completion of the physical fight-flight response
- Reaching a place of safety

OR when fight-flight is interrupted by immobility collapse

- The creation of a safe environment
- The activation of deep spontaneous breathing and shaking

Why the fear system might fail to switch off

- The absence of a place of safety
- The threat is long lasting

What happens when the fear system fails to switch off

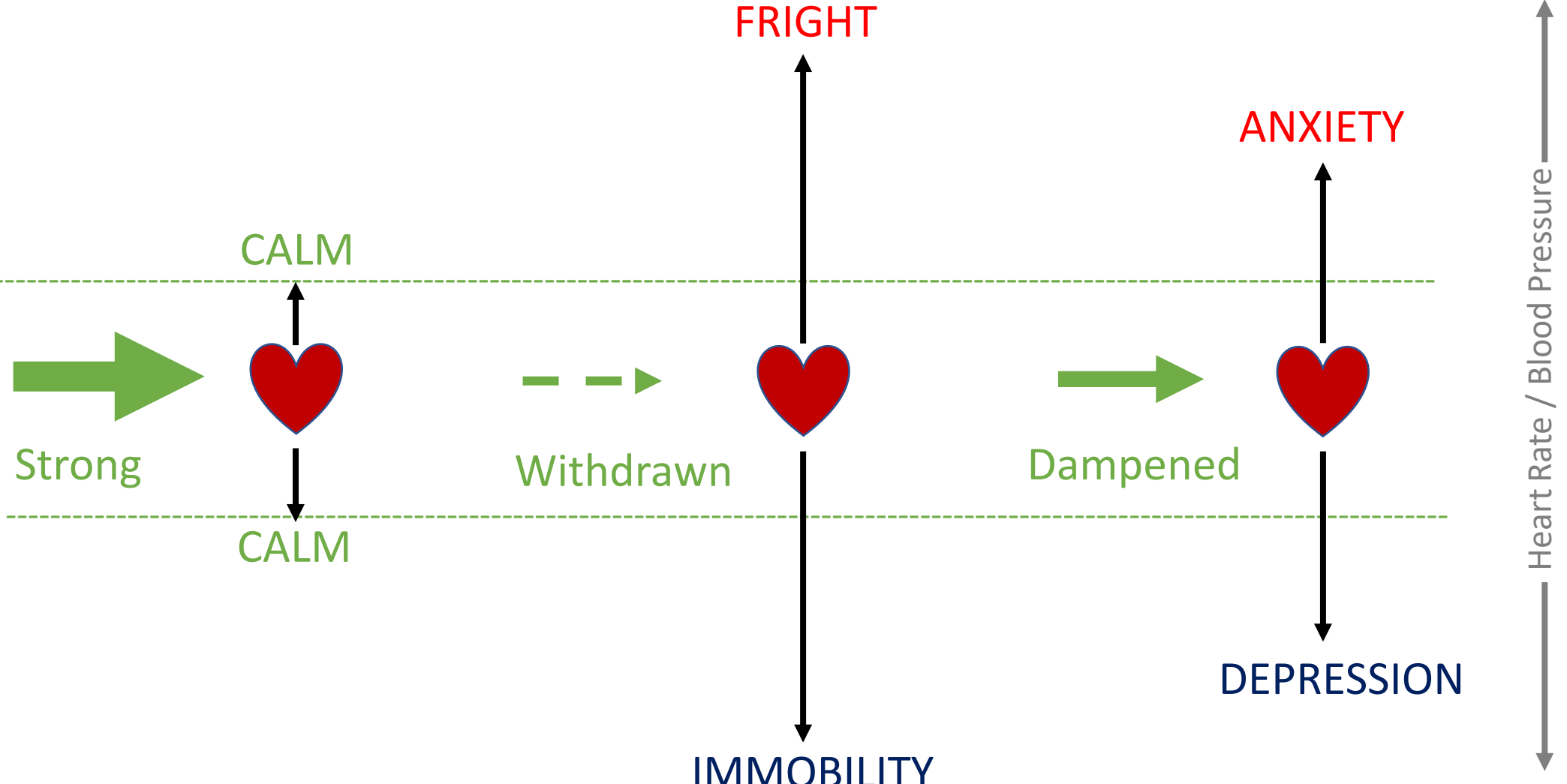
- Physical tension obstructs the fear system's reset mechanism
 - Deep breathing
 - Shaking
- Cortisol receptors become desensitized so production of fear system hormones can't deactivate
- The signal on the ventral vagus weakens over time so heart-rate regulation is impaired

The longer the fear system is active, the harder it becomes to deactivate

Fear regulation and the weakened Ventral Vagus

FEAR
AROUSAL

Ventral
Vagus Signal



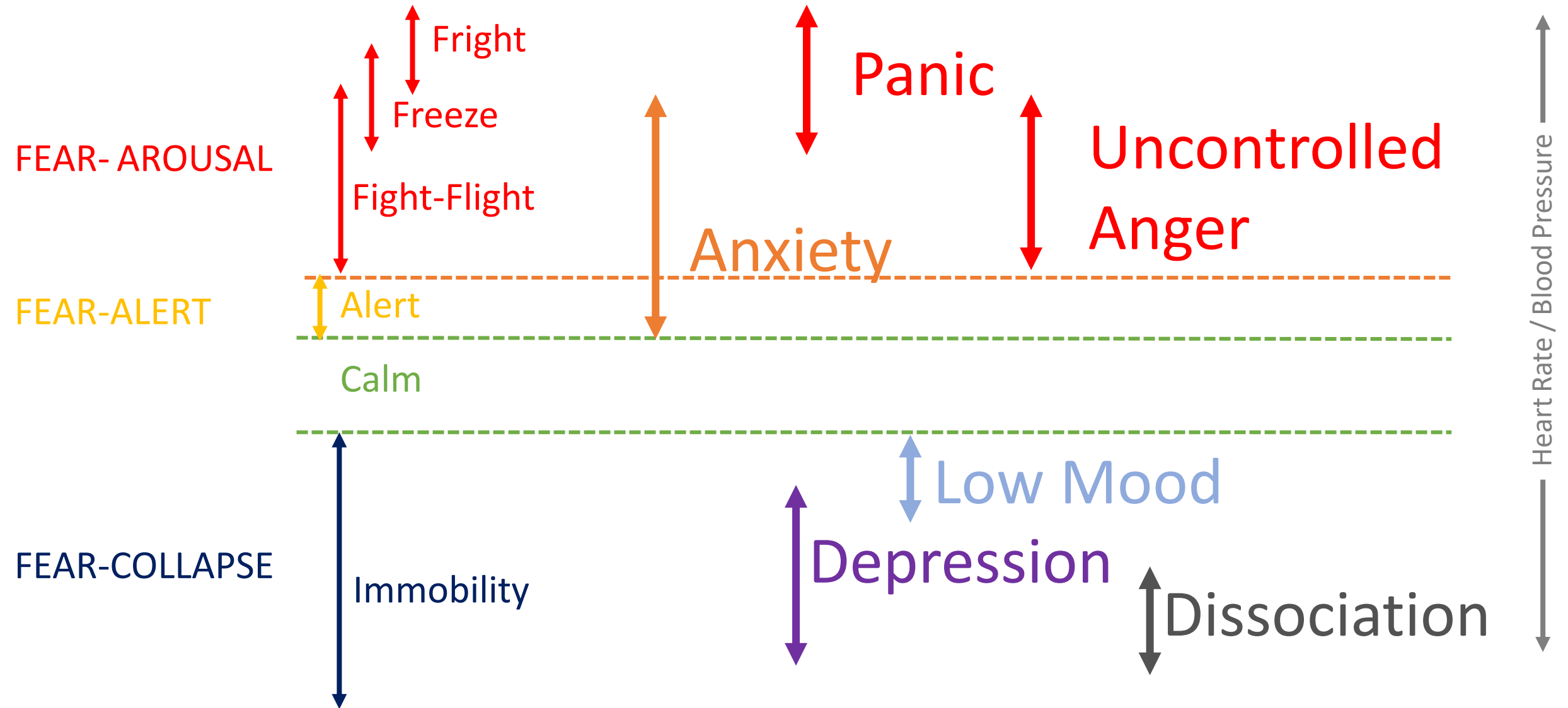
FEAR
COLLAPSE

Regulated Fear
System

Acute Fear
Activation

Chronic Fear
Activation

Conditions associated with chronic fear activation



The impact of the unregulated fear system

- Stuck in fear alert and cycling between fear arousal and fear collapse
 - Anxiety, panic or uncontrolled anger
 - Low mood, depression and dissociation
- Chronic conditions of physical illness, pain and fatigue
- Problematic behaviours of self-neglect, self-harm, avoidance, violence and addictions
- Impairment of thinking and educational disadvantage
- Problems with social engagement and relationships
- Impairment of earning ability, loss of autonomy and power
- Wider social problems – “othering”, intolerance, oppression, persecution, warfare and genocide

Key ideas

- Thinking of trauma in terms of “goal correction” (switching off fear)
- And of complex trauma in terms of a *chronic* failure of goal correction
- Defining fear system in terms of alert, arousal and collapse
- Clarifying the concept of freeze as belonging to fear arousal
- Moving from “fear cascade” (Schauer & Elbert) to “dynamics of fear”
- Looking at the mechanisms of goal correction – how fear switches off, and how this process can get stuck
- Highlighting the importance of a weakened ventral vagal signal in trauma
- Proposing depression as a partially regulated fear collapse
- Proposing anxiety as a partially regulated fear arousal
- Suggesting the biological mechanisms underpinning dissociation
- Exploring the many systems that become dysfunctional when goal correction fails, and how these further impede the regulation of fear

Planned articles

- **The theory**
 - What is Complex Trauma?
- **The implications of the theory**
 - Part 2 - Working with the body
 - Part 3 - Working with complexity
 - Part 4 - Working with safety
 - Part 5 - Working at many different levels of difficulty
 - Part 6 - Working with ourselves – the importance of self regulation

The three-part

autonomic nervous system

Social Engagement

Ventral Vagus Nerve

linked to nerves controlling face, neck, larynx and inner ear



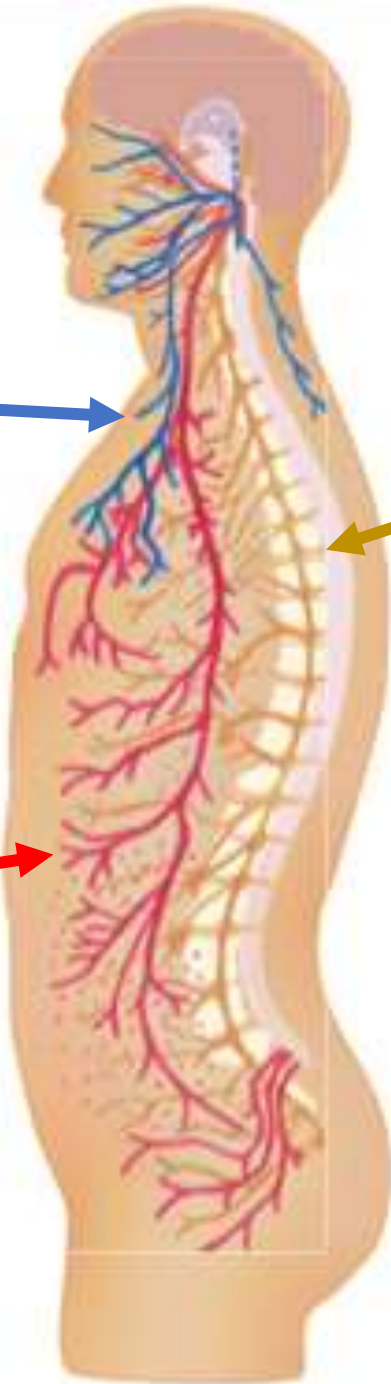
Fight-Flight

Sympathetic Nervous System



Immobility

Dorsal Vagus Nerve



Drawing of body © John & Anna Chitty (2013)
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