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The Key to Keeping Your Balance is Knowing When You've Lost it

Abstract

The last 20 years has seen huge developments in the understanding of how relationships and affect regulation shape our brains and how we cope. Recent insights from interpersonal neurobiology about stress arousal and integration have begun to be incorporated into trauma treatment and relational psychotherapeutic work. They are, however, less evident in approaches to stress management. The proposed model, 'Workable Ranges' bridges that gap. It places relational and self-regulation of psychophysical states and the integration/coherence associated with it, as central to psychological health and functioning. Accordingly, it suggests that dysregulation via flight, fight and freeze reactions over thresholds of tolerance, compromise mental functioning and contribute to common psychological health problems and stress related conditions. Drawing on models of care-giving to best support affect-regulation and integration, the paper highlights the therapeutic value of providing this psychoeducational model of stress regulation, alongside contingent empathic attunement. The model implies that facilitated self-directed tracking and modulating of stress and emotional arousal, via conscious understanding, coached body awareness and mindfulness, can play an important role in a range of interventions.

Introduction

There is much to suggest that psychophysical stress and emotional regulation is crucial to our health and functioning as we develop (Schore, 1994; Fonagy et al., 2004; Gerhardt, 2004) and throughout our lives (Posner & Rothbart, 2000; Siegel, 2012).

Most psychotherapeutic work could be said to facilitate and support self-regulation. Allan Schore has described it as a key organising principle and goal (Carroll, 2001).

Attachment research suggests that care-giving and psychotherapeutic work that facilitate emotional self-regulation work best where there is a mixture of affective attunement and the representation and feedback of mental states. In their chapter on the social biofeedback theory of affect-mirroring, Fonagy and colleagues highlight the importance of a balance between, in the moment, attunement (contingent mirroring) with the ability to step back and draw on experience and models to represent it (marked mirroring). In this way experience is contained and the ability to interpret experience, 'reflective function' is developed (Fonagy et al., 2004).

My experience within a workplace context is that popular views of stress physiology in the field of stress management focus on the notion of autonomic balance, with a paired see-saw model of 'stress response', in which activating, flight and fight reactions are settled and calmed by relaxation. The freeze component of de-activation with shutting down as a protective stress response has largely been ignored in stress physiology (Levine, 2010).

Hidden Stress

Intrapersonal and interpersonal processes procedures of closing up, inhibition and deadening of affect are familiar to many psychotherapists yet absent in the popular stress lexicon. Popular stress models, therefore, do a poor job of representing, 'marking' and normalising the broad range of experiences associated with being stressed. My awareness of my own tendency to inhibit stress and emotion and hold myself together contributed to my investigation of this material. In his studies of traumatic stress, Levine explicitly challenges the ignoring of the freeze response and associated reactive patterns in models of stress physiology (Levine, 1997 & 2010). Whilst the absence of affect, low mood and depression are sometimes linked to prolonged stress, they are not generally included as a stress response. It could be symptomatic of a wider cultural defence against low mood. This is palpable in the workplace where high stress arousal can be seen as a badge of honour and associated with being successful. Being at a low ebb, flat or sad on the other hand may be seen as signs of weakness or failure and can elicit feelings of shame and intolerance. Alternatively, from a psychotherapeutic perspective, the capacity to tolerate and process lower states of arousal, such as loss, disappointment, failure and guilt can be seen as an indication of psychological integration and health.

Whatever the reason for the omission of freeze reactions, the prevailing view of stress responses as fight or flight, leaves people facing the daily challenges of stress and emotional dysregulation without a comprehensive explanatory model. It is hard, therefore, for people to situate and track their immediate experience or judge whether they are regulated in the moment or over time. This anomaly leaves a gap between much psychotherapeutic theory and stress management and hinders therapists and counsellors who may wish to include patterns of stress reactivity in their formulations.

The Case for a More Comprehensive Model

Porges' research findings in the developing field of interpersonal neurobiology provide a more sophisticated hierarchy of stress reactions (Porges, 2001 & 2011). Siegel's model of neural integration correlates safe healthy arousal with mental integration and functioning (Siegel,1999). These developments have usefully been applied to understanding and treating traumatic stress by body therapists (Ogden et al., 2006), but seem not to have been taken up in everyday and work stress theories.

Working at the intensive end of stress dysregulation body oriented trauma therapists have led the way in applying the developing science of the psychophysiology of traumatic stress. A particular development has been the inclusion of psychoeducation and the coaching of safe mind and body states (Rothschild, 2000; Ogden et al., 2006). They have shown how collaboratively creating a felt sense of safety, in the here and now, can regulate traumatic stress arousal, and provide a safe basis for the processing of traumatic experience. My impression is that these developments have shifted a lot of psychotherapeutic practice in that direction across different theoretical models.

These new findings and theories broaden and strengthen attachment theory models of affect-regulation. I see 'Workable Ranges' as a way to bring these developments into broader application for therapists and with a wider general population. This work introduces 'Workable Ranges' as a conceptual framework and visual tool to explain the dynamics of stress and emotional regulation. 'Workable Ranges' of stress and emotion are characterised by safe and coherent rises and falls in stress arousal and emotional intensity. Within range we are more stable and flexible and can function well. When we go over our thresholds we become dysregulated and our functioning and health are compromised.

Attachment Strategies and Affect-regulation

Attachment theory, based on observational studies, is a theory of safety and protection from danger, yet seldom evident in approaches to everyday stress. Individual defences,

preferences and patterns of reacting to threat, are organised around biological differences and early relational experience. Internal and interpersonal attachment patterns are organised psycho-behavioural self-protection strategies (Bowlby, 1969; Crittenden, 2005, Holmes, 2001.) In psychosocial conditions that threaten the cohesion of the self they contribute to different forms of distress, physical health problems and psychopathology. Individual strategies or defences might involve either high-arousal and expression of emotion or inhibition and dampening of emotion and behavioural withdrawal (Crittenden, 2005). Secure attachments styles can be protective whilst insecure attachment presents risks in individual reactions to stressful events (Mikulicer & Florian ,1998).

Over the past couple of decades researchers and theorists in interpersonal neurobiology such as Allan Schore (1994), Louis Cozolino (2010) and Daniel Siegel (2007) have illuminated how attachment experiences of safety and our reactions to threat, shape our brains and become neural maps and habits. These works describe how safety and challenge in relational psychotherapy can re-shape and revise our brains and reactions. Models have developed that integrate these with the complexity of our nervous systems and how they evolved (Le Doux, 1988; Porges, 2011).

The Polyvagal Theory of Stress Physiology: More than Fight and Flight

In his seminal work, The Polyvagal Theory (2011), Stephen Porges brings together the evolution of the autonomic nervous system with the development of human social behaviour. This holistic model elucidates the multi-systemic hierarchical nature of stress reactions and that they are more complex than fight and flight.

Porges' research on the cranial vagus nerve led him to the notion of the 'vagal paradox'. 'This sensory nerve conveys information about our viscera to our brain', (Porges, Prengel interview, 2007) and plays a key part in the operation of the parasympathetic nervous system. He discovered two different strands of the vagal nerve, front and back that connect to different points in the brain and operate

differently. One of them, the ventral vagus, works to sustain us and calm us down whilst the other, the dorsal vagus, works to shut us down i.e. to freeze. Following his research on newborns demonstrating that bodies can slow down to a life threatening degree, he challenged the established view that the parasympathetic system was always good for us by modulating high sympathetic system stress arousal. It could also be dangerous. From a lifetimes work developing understanding of both strands of the vagal nerve Porges' has added to the arousal based flight or fight 'stress response' in two significant ways (Porges. 2001, 2011). Porges has demonstrated that social engagement/attachment behaviour and shutting down and freezing are both important and necessary features of a holistic comprehensive picture of stress reactivity. Of relevance to therapists generally is the notion of a social nervous system. Porges views social engagement/attachment behaviour as a sophisticated bio-psycho-social safety system that has evolved on top of the more primitive flight, fight and freeze reactions. On a physiological level it uses the ventral vagus creating visceral, cardiac and metabolic changes and neural regulation of facial expression and verbal tone for successful communication.

Porges' has demonstrated that the autonomic nervous system reacts to changes and threats in a hierarchical manner rather than a simple balance between sympathetic and parasympathetic systems. 'The polyvagal theory is a more sophisticated and integrative view of the autonomic nervous system than previous arousal theories' (Ogden et al., 2006:29). Of particular importance here is the difference between safe healthy slowing down and relaxation and more risky shutting down.

The Social Engagement or Communication System

Being with others in a social system in which we feel safe is our most developed way of being safe and modulating stress. Depending on our attachment style and the relationships and social systems we are in, this will involve a mix of safety through distance from as well as connection with others. The 'self-engagement system' proposed by Siegel (2007:170) correlates

with concepts such as internal good objects in Object Relations theory, positive self talk in CBT or 'being with' ourselves in a compassionate and mindful way in Mindfulness Based Interventions. They could all be seen as evolved layers of our social engagement safety systems. If we pick up stress from the world around us or from our own thoughts and feelings and don't have safe social connection or interaction, a supportive inner voice or mindful presence that can settle us, the body will generate the more primitive threat reactions; flight, fight or freeze, regardless of whether there is an actual physical danger or not.

Mobilisation with Fear - The Fight or Flight Reactions:

Through the stimulation of the sympathetic nervous system our breathing rate, blood pressure, heart rate, and muscle tension, are all increased as the body is prepared for a flight or fight reaction. In this state of hyper-arousal blood is diverted away from our digestive system and skin and into our larger muscle groups. Symptoms that are associated with mobilising as a response to danger include the impulse to move, rapid heartbeat and breathing, muscle tension, anxiety, panic, mental vigilance and chaotic thinking. This acceleration of energy and arousal is the most well known aspect of reacting to a sense of danger. Attention is narrowed on to the source of threat and consciousness is closed off (Siegel, 2010:23).

Immobilisation With Fear – The Freeze Reactions:

A sudden, quick freeze response may be a first reaction to threat. This initial state of halting alarm was described by Selye as the first part of his General Adaptation Syndrome (1956). This freeze is a state of vigilance and readiness to move in flight or fight, or to settle down again. Alternately, when the body cannot sustain the prolonged mobilisation of hyper-arousal and the sense of danger continues, in one form or another, a shut down or freeze reaction may be activated. This functions to preserve energy and reduce pain.

Symptoms that are associated with immobilising as a response to danger include a loss of motivation and hope, going blank, indecision, confusion, numbing, fatigue, reduced muscle tone and mobility, feeling paralysed, stuck, frozen, passivity, mental rigidity, numbness and flatness of affect. Urges to retreat and sleep may be associated with this form of self-defence. Immobilisation as a defence has been linked with the adaptive role of hopelessness and despair (Wright. 2013:22).

Neural Integration and the Window of Tolerance

Neural integration is a key concept in interpersonal neurobiology and therapy based on it (Cozolino 2002; Siegel 2010). Siegel views neural integration as a large system view of the co-ordination of autonomic, affective and cognitive processes via 'integrative functions of the embodied brain and body-proper within a relational context' (Siegel, 2007:40). He describes how neural integration supports healthy physical and mental functioning.

The prefrontal cortex serves as a key control centre, by linking 'anatomically and functionally differentiated neural regions into an interconnection of widely distributed areas of the brain and body. Structurally, these interconnections take the form of synaptic linkages, and functionally they create coordination and balance' (Siegel, 2007:41).

When we get upset or out of control 'we become "dis-integrated" as energy and activity are diverted and the middle prefrontal region stops the co-ordinating and balancing of the sub cortical regions.

Without the modifying integrative functioning of the prefrontal cortex, the lower and more impulsive limbic and brain stem areas can run amok' (2012: 10-6).

Neural integration is a state of balance and inner coherence that echoes the concept of organised attachment states. Attachment and relational experiences lay down foundational patterns for an individual's own comfort zones. In particular they lead to our having different capacities to tolerate different emotions, levels of stress

arousal and states of mind and to function with them. Siegel calls this the 'window of tolerance' in which 'various intensities of emotional arousal can be processed without disrupting the functioning of the system' (Siegel,1999:253)."Our mental experience and neural firing patterns for particular emotions and situations appear to have a span of tolerance in which we can function optimally. Within that span, within the window we do well; outside the window, we push beyond tolerable levels of arousal and move either to chaos or rigidity and lose our adaptive and harmonious functioning"

CHAOS
Window of Tolerance

INTEGRATION- Adaptive
Function and Harmony

RIGIDITY

(Siegel.2010:51)

In keeping with the characteristics of secure attachment states of mind, Siegel describes how neural integration creates a sense of coherence and flexibility. His descriptions of how, when

our tolerance thresholds of stress or particular emotions are reached, we move either to chaotic or rigid states, echo ambivalent and avoidant attachment strategies respectively. On the one side the dysregulated physical and emotional energy breaches the window of tolerance and we feel compelled to express and externalise, for example bursting out in tears or anger. On the other side when we reach the edge of tolerance we may close up, bottling up or inhibiting the energy and withdraw from contact with others.

Cozolino also links neural integration with optimal levels of arousal. Optimal arousal creates the best internal neurobiological conditions for neuroplasticity, learning and integration (Cozolino 2010:46).

Integration and Application of Models in Trauma Therapy

In the Sensorimotor model for working with traumatic stress, Ogden and colleagues (2006) synthesise and apply Siegel's concepts of 'neural integration' and 'window of tolerance' with Porges' Polyvagal Theory. Their model for understanding the regulation of autonomic arousal in relation to trauma links the ventral-vagal social nervous system with optimal arousal in the widow of tolerance. Beyond the edges of the window of tolerance, either

Theory Level of safety and	Attachment Theory	The Polyvagal Theory Hierarchy of Stress Reactions Stephen Porges	Window of Tolerance Neural Intergration Daniel Siegel
regulation		Mobilised stress reactions Flight - Move away	Chaos Limited Functioning
Unsafe - Fear Dysregulation Mobilisation Safety Regulated	Insecure states and defences Preoccupied with emotion, expression and contact Incoherent/reduced	Fight - Move towards ANS - Sympathetic	
	reflective function	Social engagement stress reactions	Neural integration Window of tolerance of stress and emotion - Optimal arousa
	Secure or stable organised attachment states Flexible responses Reflective function Coherent narrative	Social engagement street Modulation of flight, fight and freeze Safe immobilisation and relaxation Social Nervous System Ventral-Vagal nerve Parasympathetic ANS	and emotion - Optimal and Greater functioning and complexity Response-Flexibility
		Immobilising stress reactions shut down	Regidity Limited Functioning
Unsafe - real	Insecure states and defences Inhibited expression Dismissive of emotion Avoiding contact Incoherent/reduced reflective function	Freeze Dorsal Vagal Nerve Parasympathetic ANS	

Figure 1: Models of Psychophysical Safety, Stress and Emotional Reactions to Threat

side, they position sympathetic mobilisation (hyper-arousal) above it and dorsal vagal immobilisation (hypo-arousal) below it. (Ogden et al., 2006:32). Therapy is organised around explicitly creating a window of tolerance, both as respite from trauma and the optimal conditions for processing it.

A Wider Application to Working with Every Day and Work-related Stress

The understanding of stress reactivity as movements towards two poles of hyper or hypo arousal with safe optimal arousal in between has broader application. Whilst it might be crucial to bring a traumatised patient into a tolerable range the same might be said for individuals in more everyday states of stress, panic or burnout. Individual patterns of psychophysical regulation are central to how and when we are within tolerable limits of stress and emotional arousal. If neural integration is generally optimal for our well-being and functioning and for processing trauma and can be said to be an outcome of all good therapy (Cozolino 2010) then it surely must be important to any model of how we deal with every day and work-related stress.

The table in Figure 1 synthesises an attachment and interpersonal neurobiological approach to psychophysical safety and to reactions to

threat. The core concepts from attachment theory, 'secure base', 'narrative coherence' and 'reflective function' that are now well established in psychotherapy (Holmes, 2001) overlap with Siegel's, neural integration (2010) and Porges' 'Polyvagal balance' (Prengel 2011). They chime together as an integrative model of stress and affect regulation.

The Workable Ranges model grew, as my role required me to develop a proactive approach to psychological stress in the workplace and provide training interventions on working with stress. A model of mind-body regulation can convey the positive effects of being balanced over time as well as the consequences and risks of beyond tolerable limits. I began to see that it had relevance to people looking to improve their functioning and performance as well as those who had work or life challenges and wanted to feel less anxious or depressed. Integration and coherence overlap with Csikszentmihalyi's concept of 'flow' (1990) and with core elements of brain friendly working such as Rock's 'Your brain at Work' (2009).

Workable Ranges of Stress and Emotion (See Figure 2)

This diagram was initially adapted from the 'Autonomic Arousal Model' (Ogden et

	Stress	Body	Emotions	Mind	
Mobilisation	Hyper-arousal	High energy	Intense emotion	Chaos	
	Flight or fight	Tension	Impulsivity & anger	Frazzled	
	Vigilance	Increased heart-rate	out of control	Scattered attention	
	Charged	& Respiration	Anxiety and panic	racing thoughts	
Acceleration	Quick-freeze		Driven	Erratically	
				over-focussed	
	 Higher or lower aro Feelings and physical The activation of str 	ynamic Zones of Coherence ousal within a workable rang al reactions go up and down ress reactions and emotion is	e are tolerable and can ge		
	 Higher or lower aro Feelings and physical The activation of str We can adapt our re 	ousal within a workable rang al reactions go up and down	e are tolerable and can ge s modulated		
Brakes	- Higher or lower aro - Feelings and physical - The activation of str - We can adapt our re - We can take perspe	usal within a workable rang al reactions go up and down ress reactions and emotion is esponses to fit the situation ctive and focus on workable	e are tolerable and can ge s modulated	nerally be considered	
Brakes	- Higher or lower aro - Feelings and physica - The activation of str - We can adapt our re - We can take perspe	usal within a workable rangular reactions go up and down ress reactions and emotion is esponses to fit the situation of the ctive and focus on workable Low energy	are tolerable and can ge s modulated action Grief sadness	enerally be considered Hard to focus -	
Brakes	- Higher or lower aro - Feelings and physical - The activation of str - We can adapt our re - We can take perspe	usal within a workable rang al reactions go up and down ress reactions and emotion is esponses to fit the situation ctive and focus on workable	are tolerable and can ge modulated action	Hard to focus - Zoned out/adbsence	
Brakes	- Higher or lower aro - Feelings and physica - The activation of str - We can adapt our re - We can take perspen	lusal within a workable rangular reactions go up and down ress reactions and emotion is esponses to fit the situation ctive and focus on workable clow energy Sluggish immobility	are tolerable and can gest modulated action Grief sadness Dulled feelings	enerally be considered Hard to focus -	
Brakes	- Higher or lower aro - Feelings and physica - The activation of str - We can adapt our re - We can take perspen	Low energy Sluggish immobility Reduced heart-rate &	are tolerable and can ge s modulated action Grief sadness Dulled feelings Withdrawn	Hard to focus - Zoned out/adbsence of thoughts	

Figure 2: Workable Ranges of Stress and Emotion and the Less Workable States Outside

al., 2006) that depicts the tendency of people with traumatic histories to fluctuate between hyper and hypo arousal with little time in the regulated window of tolerance between. I have adapted and extended it to a general model of psychological health, functioning, and the effects of stress and emotional reactions over time. It is a way to convey solid theoretical model in an accessible way. Though in black and white here, I usually present it in colour to compliment the spatial positioning and best convey the feeling tone of fluctuating changes bodily and mental experience.

Workable Ranges are individual ranges of stress and emotional arousal within which our experience is tolerable and workable; that is where we feel safe, can cope, adapt, function and be effective. Workable ranges of stress and emotion have safe, healthy, flexible, optimal balance at the centre and individual features of limitation, at and beyond the edges of tolerance either side. Movement out of our ranges either, towards chaos on the high side or rigidity on the low side, is due to immediate or accumulative automatic reactions to threat that exceed our resources to stabilise (Siegel, 2010). Regardless of personality type or individual differences in how we react and cope, our bodies, minds, emotions and behaviour are all balanced and flexible and most adaptable and effective when within a workable range.

In this model we see how our bodies and minds are changed by our stress reactions. The model illustrates that dysregulated stress and emotional arousal either side of our range has common effects on physical, cognitive and emotional states. By visually setting out a middle range it lends itself to tracking the progress of ordinary ups and downs, to levels of stress activation of either; the sympathetic flight and fight reactions, or the parasympathetic dorsal-vagal freeze reactions. Lying outside of healthy workable balance it makes a clear statement that both poles pose serious risks to wellbeing, health and functioning. It is important to note that this is the case regardless of whether someone is aware of it or not. It may be useful to persuade people who suffer from stress-related conditions, but say they do not 'feel' stressed, to consider stress regulation techniques or therapy.

When I present this chart, or a simplified hand drawing of it, to clients, they mostly relate to it immediately. We often use it to track recent experience.

Sonia came for a consultation as she was finding it hard to cope with a family crisis and intense work demands. She began by describing feelings of panic at certain points during the day and in the middle of the night, when her mind would start churning over one thing or another. When I showed her the diagram she could see that with one or the other issue she would be going up and down within her workable range but the stressors together had pushed her out of it. Without my prompt she began to look at the low side and said, 'I've also been feeling flat and shut down and not enjoying time with friends'.

People are able to see that their state is constantly oscillating and how, often, periods of lowness follow on from high stress activation. They 'get' that whether life has become stressful or problematic, is determined as much by whether or not they are within their threshold of tolerance at any time as by the detail of any particular stressor.

Individual Ranges

We seem to have our own 'workable ranges', individual and dynamic spans of stress and emotional arousal in which things are more or less OK. Whilst it will lie between high and low arousal for all of us, there are differences in what emotions and levels of arousal we are comfortable with. We develop more or less tolerance and preference for slightly higher or lower states and internal and interpersonal strategies for dealing with life. The limits of the range are boundaries or edges at the 'thresholds of response' that we all have to various forms and quantities of stimulation (Ogden et al., 2006:28). Some people seem to have their range at a higher level of arousal and cope well with intensity and pressure but can't stand low arousal, weariness or sadness. Whilst others have a lower range, are OK feeling a bit flat or stuck but become unsettled and alarmed by a higher intensity of arousal such as anger.

This was the case with Sonia. It became apparent through her incoherence in describing her

feelings about one family member and a work colleague, that she was uncomfortable with anger. I suggested this to her. 'I've always been like that, I like to please people and don't like conflict', she replied. She could see her feelings about the behaviour and demands of these two people pushed her out of her comfort zone, and that her difficulty in finding a way of protesting or asserting herself, were key factors in her feeling out of kilter.

Whatever the general nature of our own ranges, they will slide up and down and expand and contract over time. They will usually change over the course of a day, as we react to the world around us and to our inner experiences. When life is going all right our individual experience will wave up and down within range as the range contracts and expands. A rolling pattern of arousal and mood including being pushed to and beyond the edges of our tolerance are part and parcel of everyday life. Equilibrium may be restored through the passage of time, supportive inner talk, and behavioural adjustments such as resting, sleep, eating, exercise, social connections and enjoyable activities.

Narrow Ranges

Some people seem to have narrow workable ranges and haven't developed the resources to adapt and manage certain states. This may be due to too many threats and stressors and not enough or inconsistent regulation in formative years. This is apparent in people with borderline personalities whose fear and intolerance of stress and emotion is high. Alternately narrow workable ranges may be stem from a high level of early safety and security, unfamiliarity with interpersonal and social danger, or an approach to life that is predicated on keeping things safe and steady. We will see later how chronic stress dysregulation, like trauma can shrink workable ranges over time.

Outside of Range - Derailing into Risky Dysregulation

Being dysregulated is by the nature of it unsettling and likely to cause our automatic reactions to be stronger and more dysregulating. The more this happens, the harder it can be to break the pattern. Those of us whose workable range is on the higher side might push away emotional pain and sadness by igniting high stress arousal, excitement or business. I see this a lot in driven people whose are intolerant of slowness and lowness with little let up in their internal or external system to allow for appropriate dips and time for recovery. On the other hand, those of us whose workable range is at the lower end might be compelled to protect themselves against the chaos and uncontrollability of highly charged emotions such as of anger, by closing down and withdrawing.

Unsettled psychophysiology creates unstable states of mind that we are unfamiliar with and find it hard to navigate our way out of. It may be that a level of hyper-arousal is suddenly too much for those with lower ranges or that chronic arousal becomes unsustainable for people with higher ranges. Outside of the boundaries of our workable ranges we are likely to feel out of our comfort zone and out of our depth. Sleep disturbance can play a large part in perpetuating dysregulation. With too much hyper-arousal and threat based emotion during the day, the body and mind can't let go and settle to sleep. The following day, tiredness, or psychophysical shutting down to recover, may be experienced as a threat if we 'have to' get things done and we get going again with a surge of adrenaline and anxiety. Self-criticism, intolerance and shame can add to the perpetuation of cycles of stress reactivity. Our sense of who we are may feel threatened. We can scare ourselves more by our resistance to or interpretation of feeling out of control. One of the most common responses to my sharing the workable ranges model with clients who are struggling with life outside of their range is relief. 'So, I'm not going mad then!'

Unfortunately, as creatures of habit, we repeat and intensify our coping strategies even when they don't fit the current context or situation and need to change. Under pressure it is very hard to be flexible and change. At the very point that we need to change strategy, as we're pushing ourselves beyond range at the top, or digging ourselves in below range, it's most difficult for us to do so. We cling to our habits, that which we know. It is exacerbated by the fact that our consciousness is compromised in the grip of

either hyper-arousal or hypo-arousal (Siegel, 2010:23). From a neural integration point of view the conditions for change and learning are lost. Fear moves us out of awareness and integration towards dissociation (Cozolino, 2010:20). Our capacity to be self-aware, and to interrupt stress reactivity and settle ourselves is thwarted.

Spending too long at one side of our range, reaching a more extreme threshold can be risky and. It uses up masses of energy. I sometimes liken it to trying to remain standing on shaky ground or a wobble board at the gym. You can just about appear to be steady but it uses a lot of energy and cannot be sustained.

Unworkability - Wired and Tired – (See Figure 3)

Figure. 3 shows the movement and changes in arousal of someone who is seriously dysregulated. Chronic stress has a lot in common with traumatic stress in that people oscillate between hyper and hypo arousal, feeling out of control or overwhelmed by either extreme and with little respite in between. The pattern is maintained by each extreme state triggering the other. Workable ranges are compromised and narrowed. There is no good safe place to be. In this state the experience is of volatility, of lurching from pillar to

post, unsettled. The phrase 'wired and tired', expresses it well. In this state the experience is of being too depleted to do things that might bring safe liveliness and vitality but also too agitated and charged to switch off safely and healthily. It can become completely unworkable in that the person can't function and it is really hard to, work with it, to change and transform it. People who lose their workable range in this way are in trouble. At a clinical level this can often be seen as an oscillation between the symptoms of anxiety and depression. This model supports the view that common mental health problems might be viewed as part of a bigger picture of dysregulation and disintegration (Cozolino, 2010).

Burnout and the Collapse of the Capable

In the workplace context, I have been struck by the sudden and sometimes extreme deterioration in the wellbeing and functioning of previously resilient people once their high threshold of tolerance was finally breached. Capable and conscientious staff present for help on the brink or at the point of collapse. The pattern of capable people doing and giving more, minimising their needs and sacrificing activities that nourish and resource them has been described by Tim Cantopher as the 'Curse of the Strong' (2003). He sees psychophysical

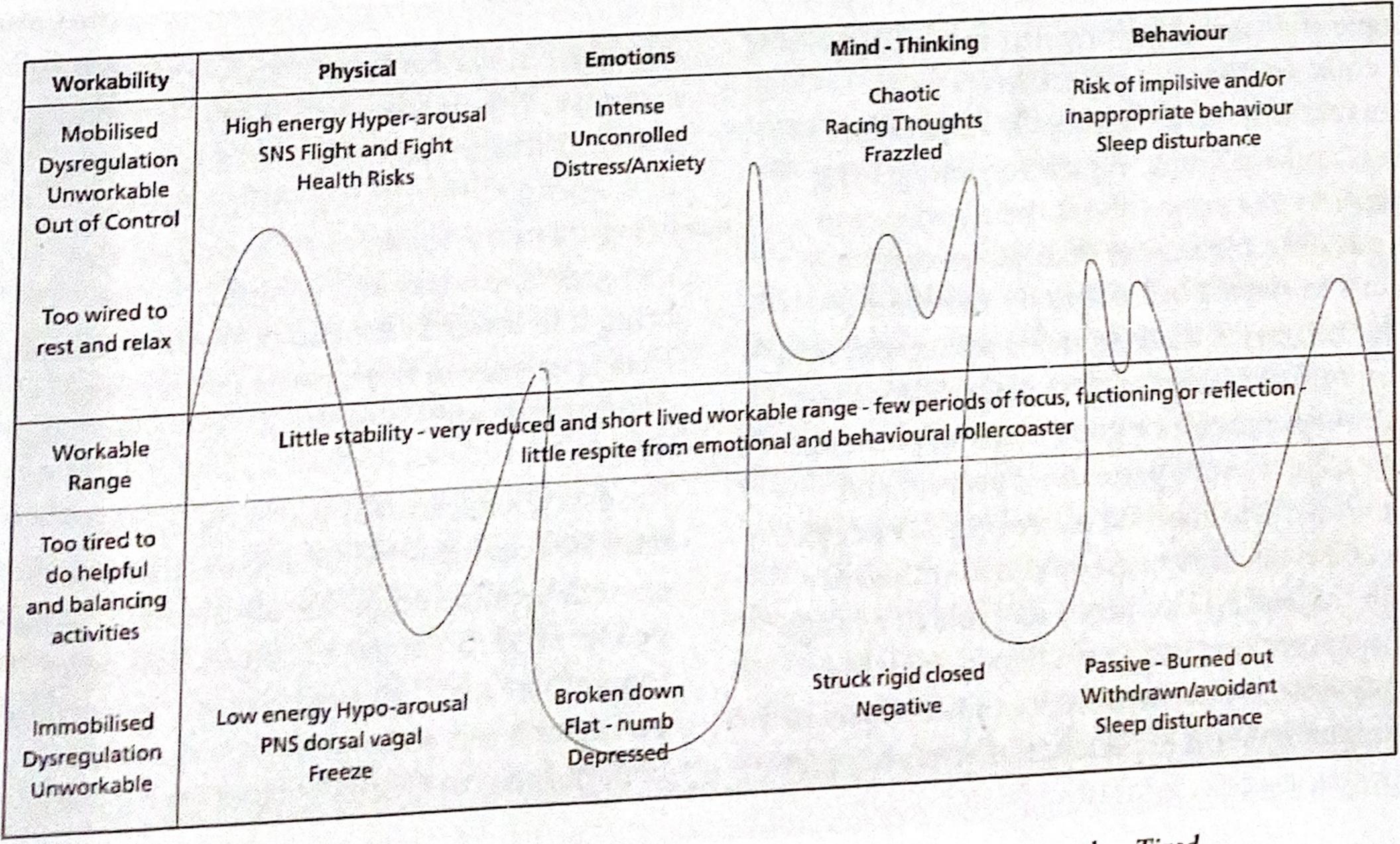


Figure 3: Unworkability Reduced Workable Range - Dysregulaed - Wired or Tired

depletion as a major factor in a lot of depression. I have been shocked by the depth of the freeze reaction or shut down in staff that 'hit the wall' or 'grind to a halt'. A significant number describe states of intrusive arousal and reactivation coupled with blank withdrawal that closely resembles traumatisation. Rothschild & Rand (2006) describe and work with these patterns in therapists and carers with therapeutic burnout or 'Compassion Fatigue'.

Implication For Practice

Psychoeducation

The Workable Ranges model provides an easy to grasp integrative model that sets a range of common experiences in a visual framework that people can readily relate to. It can be used to illustrate how different stress and emotional reactions and the cognitive processes that accompany them may be risky, either in degree or over time. It shows that psychophysical safety, supportive social or self-engagement contribute to our functioning as well as our wellbeing. My experience with clients in the roll of dysregulation is that psychoeducation of this kind can be containing. It can be particularly helpful to differentiate between safe and risky mobilising arousal and between safe immobilisation 'relaxation' and unsafe shutting down or depletion. As an accessible model it can be used to inform and empower people and can act an organising backdrop for collaborative relational therapeutic interventions. Articulating the importance of stress and emotional regulation and getting people to be curious about their bodies and minds offers a number of different entry points to restore balance and functioning. Whether it is to address stress related physical symptoms or issues in personal relationships the model provides a good starting point for the exploration of patterns of arousal and emotions. The 'marked mirroring' (Fonagy et al., 2004) of stress and emotional imbalance with this model can play a key role in a range of interventions with any client group. My experience is that explicit use of the model can map and contain experience. Conveying that well being and functioning go hand in hand

can provide a rationale to motivate people to engage with self-care or therapeutic support.

Safety, Stabilisation, Regulation and Integration

It is perhaps common for integrative therapists to see regulation as a key part of interventions and prerequisite for change (Cozolino, 2010). Safety and stabilisation may be made explicit; whether as the key focus of therapy (Ogden et al., 2006) or where the conscious modulation of the fear system as a 'fear-free caregiver' (McCluskey, 2011) provides the essential foundation for creative exploration (Heard et al., 2009). Physiological and psychological safety as an imperative appears to be less established in stress management. The 'Workable Ranges' model encourages the investigation of embodied safety and stabilisation with the client. This may include facilitating social engagement (Porges, 2001) and self-engagement (Siegel, 2010), interactive or self-regulation (Beebe and Lachmann, 2002) or in body psychotherapy terms, vertical self-regulation via breathing and movement and horizontal regulation via interaction (Carroll, 2009). Mindfulness techniques can be used as a self-directed regulatory activity or a form of self-engagement creating security and safety inside.

My work suggests that the model can explicitly link experiences of being held and helped in the consulting room with the social engagement system as an effective stress response. This can support people in valuing and prioritising their personal and working relationships. The timing and method of bringing in the model will depend on the therapeutic context and contract. I often bring it in towards the end of the first session. The experience of having alien experience understood can be reassuring and stabilising.

The psychoeducational use of the model must be accompanied by and balanced with enough genuine empathic attunement. Some people need this sense of connection more than others and will not be able to move onto an explanation without it. Others search for containment through explanation and will be able to soften and feel more in touch with themselves and be more open to being helped,

if given an explanation of their experiences. When people are able to recognise and order their experience it can create collaboration on what to focus on in an intervention

Coached Body Awareness and Mindfulness

Helping people discover or restore a felt sense of safety and stability that they can recognise is likely to work best when starting with the body and working in the moment. An exploration with clients of their own resources that support psychophysical regulation can be really useful. Experiences that are likely to feel safe, settling, engaging or revitalising can be identified. I suggest that becoming conscious of the sensory experience in their bodies of feeling safe and engaged will help their bodyminds know they are safe and create stability.

Practicing paying attention to direct sensory experience in the moment creates an open receptivity to experience that actively creates neural integration (Siegel, 2007: 40).

Observing and 'being with' experience opens the communication pathways in the brain that shut down when we are threatened and stressed. I apply key aspects of the Mindfulness Based Stress Reduction (Kabat-Zinn, 1990) programme in some way to all my work. This includes: body awareness, awareness of the felt signs of stress reactions, stepping back from thinking habits that amplify reactivity, building acceptance and tolerance of unfamiliar and unpleasant sensations, knowing that they will pass, choosing options of how to 'be with' difficult experience without blocking or being overwhelmed by it. These skills and attitudes can create the ability to 'respond' to dysregulating stress and emotion that undermine functioning, rather than 'reacting' automatically (Kabat-Zinn, 1990: chapter 20). If we can intentionally establish periods within our workable ranges, we can consciously develop resources and skills for regulating and tolerating unpleasant sensations, stress and emotional arousal at the edges of our range (Williams et al., 2007:144). Developing tolerance of states that we usually get caught up in, or push away, will, in time, strengthen the capacity to be both stable and flexible and in turn build resilience.

Conclusion

Porges' (2011) hierarchy or stress reactions and positive models of neural integration within a 'window of tolerance' (Siegel 2007) or optimal arousal (Cozolino 2010) provide a good basis for a model of stress and emotional regulation. How these insights have been used in the treatment of traumatic stress (Levine 2010 & Ogden, Pain and Minton 2006) provide valuable insight into psychophysical regulation that can be usefully developed and applied to broader populations.

'Workable Ranges' is a comprehensive integrative alternative to the popular models of stress management. It includes stress reactions and coping strategies that are organised around inhibition, blocking and numbing of arousal.

It can be presented visually as a general and accessible model of psychological health and balance. The model highlights the positive benefits of regulation and the value of proactively developing self-regulation skills. People with narrow or inflexible workable ranges and emotional regulation strategies and resources, and those who neglect their own experience, putting work or others first, are most vulnerable to the dysregulating effects of everyday personal and work stressors. It is suggested that using the model explicitly as psychoeducation is a good basis for a range of interventions from proactive training to intensive psychotherapy. In collaborative working with the model, the process of change involves moving from avoidance of experience to awareness and regulation of it, both at a micro level in the moment and on a larger scale over time.

My intention in this paper was to introduce 'Workable Ranges' as model to bridge interpersonal and affective neurobiology, integrative therapies and stress management. I have confidence in the immediate emotional resonance that colleagues and clients have had with it and of the theories and practices that inform it. I plan to continue to test out the application of this model with clients, and in relation to everyday and workplace stress. I am keen to explore the utility of it as a generic model for different practitioners and settings and welcome feedback.

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