#### **BLUEWATER FAMILY SUPPORT SERVICES**

# BluesNews

Volume 11, Issue 7

#### November 2017



Since early October, 2017, The National Institute for the Clinical Application of Behavioral Medicine (NICABM) has been promoting and podcasting their newest education series, Treating Trauma Master Series. Throughout this period, NICABM has released several documents and infographics: a

number of them are reprinted here.

Additionally, we are also including two graphics we have used extensively in the past which we will now replace. Page 7 is a graphic from B Post's and H Forbes', "<u>Beyond Consequences, Logic and Control</u>." Post and Forbes explicate regulation as the "ability to experience and maintain stress within one's window of tolerance." In the accompanying graphic, Post and Forbes illustrate some of the responses that are typically considered to be signs of dysregulation consistent with either hypo– or hyper–arousal. There is no attempt, beyond four short words, to explicate, "window of tolerance".

Furthermore, Dr B Perry's, "Fear Changes the Way We Think" and NICABM's "How Trauma Impacts Memory" are complementary. They do not speak to the same issue. Perry's "Fear ..." addresses cognitive functioning overall and nicely outlines the progressive cognitive inhibition that occurs through the transition from calm to terrror. The more frightened we are, the less able we are to think. "Trauma...", on the other hand, illustrates the potentially enduring impact of trauma on four component parts of memory.

The connections between trauma and memory are very complex. We will revisit the links between trauma and memory in a future edition of BluesNews. For now, share and enjoy. WJG

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### Four Concrete Steps for Working with Trauma

Bessel van der Kolk, MD and Ruth Buczynski, PhD

#### Step 1: Start with Self-Regulation

**Dr. van der Kolk:** I would say the foundation of all effective treatments involves some way for people to learn that they can change their arousal system.

Before any talking, it's important to notice that if you get upset, taking 60 breaths, focusing on the out breaths, can calm your brain right down. Attempting some acupressure points or going for a walk can be very calming.

Dr. Buczynski: So this is learning to modulate arousal?

**Dr. van der Kolk:** Yes, and there's alarmingly little in our mainstream culture to teach that. For example, this was something that kindergarten teachers used to teach, but once you enter the first grade, this whole notion that you can actually make yourself feel calm seems to disappear.

Now, there's this kind of post-alcoholic culture where if you feel bad, you pop something into your mouth to make the feeling go away.

It's interesting that right now there are about six to ten million people in America who practice yoga, which is sort of a bizarre thing to do - to stand on one foot and bend yourself up into a pretzel. Why do people do that? They've discovered that there's something they can do to regulate their internal systems.

So the issue of self-regulation needs to become front and center in the treatment of traumatized people. That's step number one.

#### Step 2: Help Your Patients Take Steps Toward Self-Empowerment

The core idea here is that I am not a victim of what happens. I can do things to change my own thoughts, which is very contrary to the medical system where, if you can't stand something, you can take a pill and make it go away.

The core of trauma treatment is something is happening to you that you interpret as being frightening, and you can change the sensation by moving, breathing, tapping, and touching (or not touching). You can use any of these processes.

It's more than tolerating feelings and sensations. Actually, it is more about knowing that you, to some degree, are in charge of your own physiological system.

There needs to be a considerable emphasis on "cultivating in myself," not only as a therapist, but also as a patient – this knowing that you can actually calm yourself down by talking or through one of these other processes.

So, step number two is the cultivation of being able to take effective action. Many traumatized people have been very helpless; they've been unable to move. They feel paralyzed, sit in front of the television, and they don't do anything. Programs with physical impact, like model mugging (a form of self-defense training), martial arts or kickboxing, or an activity that requires a range of physical effort where you actually learn to defend yourself, stand up for yourself, and feel power in your body, would be very, very effective treatments. Basically, they reinstate a sense that your organism is not a helpless (tool) of fate.

#### Step 3: Help Your Patients Learn to Express Their Inner Experience

The third thing I would talk about is learning to know what you know and feel what you feel. And that's where psychotherapy comes in: finding the language for internal experience.

The function of language is to tie us together; the function of language is communication. Without being able to communicate, you're locked up inside of yourself.

So, learning to communicate and finding words for your internal states would be very helpful in terms of normalizing ourselves - accepting and making (the communication of internal states) a part of ourselves and part of the community. That's the third part.

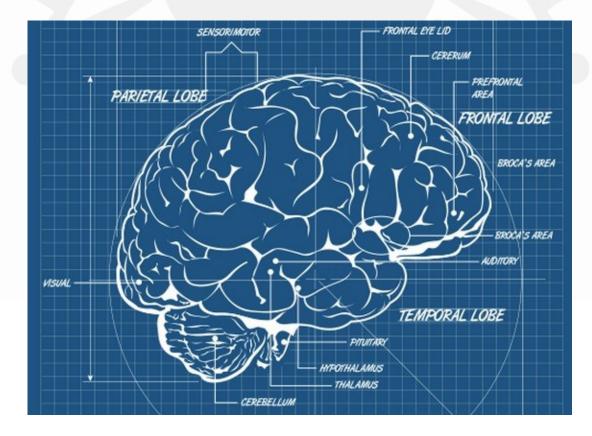
#### Step 4: Integrate the Senses Through Rhythm

We're physical animals, and to some level, we're always dancing with each other. Our communication is as much through head nodding and smiles and frowns and moving as anything else. Kids, in particular, and adults, who as kids were victims of physical abuse and neglect, lose those interpersonal rhythms.

So, some sort of rhythmical interaction to establish internal sensory integration is an important piece that we are working on. With kids, we work with sensory integration techniques like having them jump on trampolines and covering them with heavy blankets to have them feel how their bodies relate to the environment because that's an area that gets very disturbed by trauma, neglect, and abuse, especially in kids.

For adults, I think we've resolved rhythmical issues with experiences like tango dancing, Qi Gong, drumming – any of these put one organism in rhythm with other organisms and is a way of overcoming this frozen sense of separation that traumatized people have with others.

**Dr. Buczynski:** These are four keystones that can make healing from trauma faster and more effective. In order to give patients the best chance for recovery, consider these steps as you plan your interventions and treatments

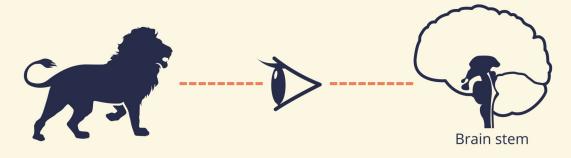


# WHAT HAPPENS IN THE BRAIN

during a potentially traumatic event?

## The brain stem is critical in fast, defensive responses. It's directly connected with the retina.

The retina sends visual information to the brain stem immediately - before higher levels of the brain are even aware of the threat.



# If the predator moves closer, the periaqueductal gray initiates a fight or flight response.

The periaqueductal gray activates the sympathetic nervous system.

Heart rate goes up. Blood flow to muscles increases. Blood pressure increases. Pupils dilate.



#### But it's not always safe or possible to fight or escape.

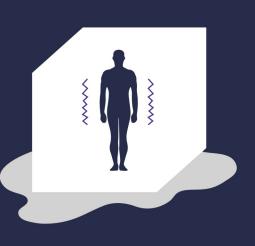
That's when a person may enter the freeze response, or feigned death.

Now the periaqueductal gray activates the parasympathetic nervous system as well.

Muscles get tight and freeze. Both gaze and breath may freeze.

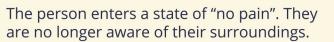
#### This is not a cognitive choice.

These "decisions" are made at the level of the brain stem and the nervous system.



# If the predator doesn't move away, the person may shutdown completely.

Heart rate drops. Respiratory rate drops. Some people stop breathing. Muscles become limp. Metabolism shuts down. Endorphins are released.





During inescapable trauma, this is a very adaptive way for the brain and body to respond.



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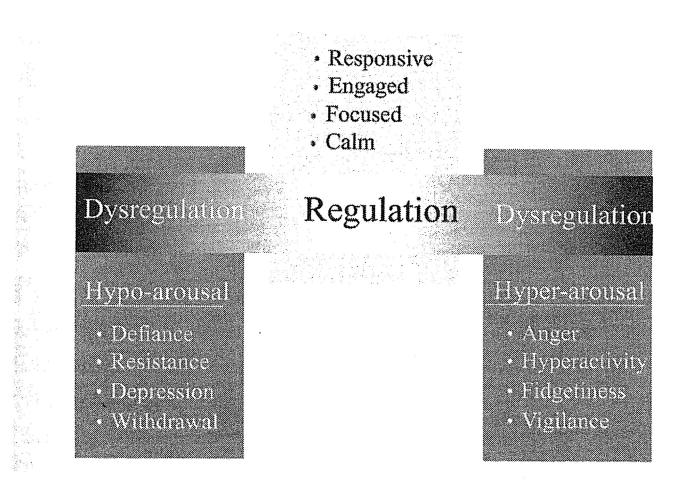
### How Trauma Can Affect Your Window of Tolerance

#### HYPERAROUSAL This is when you feel extremely anxious, angry, or even out of control. Unfamiliar or threatening feelings can overwhelm you, and you might want to fight or run away. DYSREGULATION This is when you begin to feel agitated. You may feel anxious, revved up, or angry. You don't feel out of control, but you also don't feel comfortable. **Stress and Trauma** Your Work with **Can Shrink Your** WINDOW OF TOLFRANCE **Your Practitioner Can** Window of Tolerance. Help to Enlarge Your This is where things feel just right, where you Window of Tolerance. are best able to cope with the punches life This means that it throws at you. You're calm but not tired. You're may be harder to stay They can help you alert but not anxious. calm and focused. stay calm, focused, When you're outside and alert even when your window of something happens tolerance, you may that would usually be more easily throw you off thrown off balance. balance. 53 DYSREGULATION This is when you begin to feel like you're shutting down. You may feel a little spacy, lose track of time, or start to feel sluggish. You don't feel out of control, but you also don't feel comfortable. HYPOAROUSAL This is when you feel extremely zoned out and numb. both emotionally and physically. Time can go missing. It might feel like you're completely frozen. It's not

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something you choose - your body takes over.

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An elderly couple learned to send text messages on their mobile phones.

The wife, a retired college English instructor with emphasis on the Classics, was an unapologetic romantic; her husband, a retired military officer of thirty years' service, was a no-nonsense guy.

One afternoon the wife went to the local Starbuck's to meet a friend for coffee. While awaiting her friend's arrival, she exercised her new skill by sending her husband a romantic text message: "If you are sleeping, send me your dreams. If you are laughing, send me your smile. If you are eating, send me a bite. If you are drinking, send me a sip. If you are crying, send me your tears. I love you."

The husband responded: "I'm in the bathroom, takin' a s\*\*\*. Please advise."

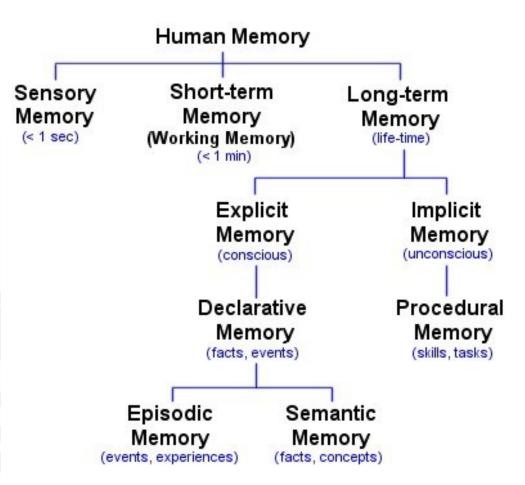
A man got on a plane with both of his front trouser pockets full of golf balls and sat down next to a beautiful (yes, you guessed it) blonde. The puzzled blonde kept looking at him and his bulging pockets.

Finally, after many glances from her, he said, "It's golf balls."

The blonde continued to look at him for a very long time, thinking deeply about what he had said. After several minutes, not being able to contain her curiosity any longer, she asked, "Does it hurt as much as tennis elbow?"

What we usually think of as "memory" in day-to-day usage is actually long-term memory, but there are also important shortterm and sensory memory processes, which must be worked through before a long-term memory can be established. The different types of memory each have their own particular mode of operation, but they all cooperate in the process of memorization, and can be seen as three necessary steps in forming a lasting memory.

This model of memory as a sequence of three stages, from sensory to short-term to longterm memory, rather than as a unitary process, is known as the **modal** or **multistore** or Atkinson-Shiffrin model, ... it remains the most popular model for studying memory.



### FEAR CHANGES THE WAY WE THINK

Adaptive Response	Rest (Adult Male)	Vigilance	Freeze	Flight	Fight
HyperArousal Con- tinuum	Rest (Male Child)	Vigilance	Resistance	Defiance	Aggression
Dissociative Con- tinuum	Rest (Female Child)	Avoidance	Compliance	Dissociation	Fainting
Sense of Time	Extended Future	Days / Hours	Hours / Minutes	Minutes / Seconds	Loss of sense of time
Primary	NeoCortex	Subcortex	Limbic	Midbrain	Brainstem
(secondary)	Subcortex	Limbic	Midbrain	Brainstem	Autonomic
Brain Areas					
Cognition	Abstract	Concrete	Emotional	Reactive	Reflexive
Mental State	CALM	AROUSAL	ALARM	FEAR	TERROR

cortex collect information from different brain areas to create semantic memory. Temporal lobe Inferior parietal lobe	Related Brain Area The temporal lobe and inferior parietal	How Trauma Can Affect It Trauma can prevent information (like words, images, sounds, etc.) from differ- ent parts of the brain from combining to make a semantic memory.		Example You remember what a bicycle is.	What It Is The memory of general knowledge and facts.	SEMANTIC MEMORY	EXPLICIT	How Trauma
ing and recalling episodic memory.	Related Brain Area The hippocampus is responsible for creat-	How Trauma Can Affect It Trauma can shutdown episodic memory and fragment the sequence of events.		<b>Example</b> You remember who was there and what street you were on when you fell off your bicycle in front of a crowd.	What It is The autobiographical memory of an event or experience – including the who, what, and where.	EPISODIC MEMORY	EXPLICIT MEMORY	How Trauma Impacts Four Different
supporting memory for emotionally charged experiences. Amygdala	Related Brain Area The amygdala plays a key role in	How Trauma Can Affect It After trauma, a person may get triggered and experience painful emotions, often without context.		<b>Example</b> When a wave of shame or anxiety grabs you the next time you see your bicycle after the big fall.	<b>What It Is</b> The memory of the emotions you felt during an experience.	EMOTIONAL MEMORY	IMPLICI	
habits.	Related Brain Area The striatum is associated with producing	How Trauma Can Affect It Trauma can change patterns of procedural memory. For example, a person might tense up and unconsciously alter their posture, which could lead to pain or even numbness.	·	Example You can ride a bicycle automatically, with- out having to stop and recall how it's done.	What It Is The memory of how to perform a common task without actively thinking	PROCEDURAL MEMORY	IMPLICIT MEMORY	Types of Memory

### What Resets Our Nervous System After Trauma

#### Peter Levine, MD and Ruth Buczynski, PhD

**Dr. Levine:** When I first started developing my approach to trauma – and this was in the sixties and seventies, so it was way before the definition of trauma as PTSD – I noticed how many different kinds of sometimes even seemingly ordinary events could cause people to develop symptoms that would be later defined as trauma, as PTSD.

And I also was really curious why animals in the wild – because the parts of our brain that respond to stress are really quite the same in all mammals, including us – and if they became so easily traumatized, they probably would never survive because they would lose the edge, and then they wouldn't survive nor would the species survive.

So I realized there must be some powerful innate mechanism that helps people rebound; that sort of resets our nervous system after encounters with stress, highly arousing encounters with stress. And I discovered that these reactions that reset the nervous system are identical with animals and with people. The difference is that we learn to override it because of fear of powerful sensations.

And if we could just be guided – I know it is an oversimplification – but the basic idea is to guide people to help them recapture this natural resilience. And we do this through helping them become aware of body sensations. And as they become aware and able to befriend their body sensations, they are able to move out of these stuck places.

Because I realized that trauma was about being stuck in these high levels of arousal or in low-level, shutdown levels of arousal and dissociation. So it really became a matter of learning how to help people to contain these sensations and help them to move through, back into life, to discharge, as it were, these high-levels of activation.

And in animals – and in humans – I noticed it [trauma] as a particular type of sequence involving shaking and trembling.

We can help move people out of these high states of hyper arousal back into balance, back into equilibrium. We want to help people come out of shut-down and dissociation, come back into life, and it's possible to do this in a safe way; in a way that really largely ensured that people weren't overwhelmed – you know, that was a problem in the therapies at that time which were very cathartic.

So they would have people with really big reactions, and often people would feel better after that – probably, at least in large part, because there was a releasing of endorphins and catecholamines, adrenalin-like hormones, and neurotransmitters, and so the people, in a way, they felt a tremendous relief, even a high. But then they would go back into the same trauma patterns afterwards.

So I realized that, again, if you just overwhelm the person, the nervous system really can't tell the difference between the trauma and just being overwhelmed/overloaded in the same way.

So that really is the basis of the core aspects of somatic experiencing. And because it was a naturalistic way of approaching things – learning from animals in the wild, from ethology (I actually called my first book Waking the Tiger, dealing with trauma) – to awakening those resilient instincts that exist within us because we are mammals.

#### The Nine-Step Method for Transforming Trauma

**Dr. Buczynski:** Let's go through briefly your Nine-Step Method for transforming trauma.

**Dr. Levine:** The first thing is that you have to create a sense of relative safety. Remember we talked about the social engagement system – you have to help the person feel just safe enough to begin to go into their bodies.

Then, from that sense of relative safety created by the therapist and the environment, we help the person support initial exploration and acceptance of sensations. And we do it only a little bit at a time, so they "touch into their sensations" then come back into the room, into themselves.

The third step is a process I call "pendulation." That's a word I made up – what it means is that when people first begin to experience their body sensations, they actually feel worse for a moment. It is probably largely because they have avoided their sensations. So when they feel them, they feel worse.

This is like a contraction. But what I have discovered is when you help support people, they discover that with every contraction there is an expansion. So if they learn just to stay with these sensations just momentarily long enough, it will contract but then it will expand. And the rhythm between contraction and expansion, that really gives people the sense, "Oh my God, I'm going to be able to master this!"

So, again, when they get the sense or rhythm, of contraction/expansion, it needn't become threatening. It just becomes, "Oh, okay, I'm contracting, and now I'm expanding."

The fourth step, which is really the first, and the second, and the third, and the fourth, fifth, sixth, seventh and eighth, is what I call "titration." And by titrating, by just dosing one small amount of experience at a time, this creates an increase in stability, resilience, and reorganization of the nervous system. So titration is about carefully touching into the smallest drop of survival-based arousal...

Dr. Buczynski: So sort of like a homeopathic approach to trauma? A homeopathic dose level of approaching...

**Dr. Levine:** Yes! Yes, that's it! Yes, that is exactly a really good analogy – and it may be more than just an analogy. You know, we have a number of homeopaths, particularly in the European and South American trainings – and, you know, they get it – the idea of the smallest amount of stimulus that gets the body engaged in its own self-defense mechanisms.

Then the fifth step is to provide corrective experiences by helping them have active experience that supplants or contradicts the passive response of collapse and helplessness. So as they recover active responses, they can feel empowered – active defensive responses.

When people are in the immobility response, when they are in the shut-down state, what happens is that normally in animals, it's time-limited. I was out on the beach the other day and some of the kids on the beach do this for fun – they will take one of the pigeons and hold it. They will come up very quietly behind the pigeon, hold around its wings so it can't move, and then turn it over and it goes into this complete immobility response. It doesn't move. It looks like it is dead – it is so-called "playing possum." But then, if they [the kids] leave it for a moment upside-down there on the sand, after a few seconds, it pops out of this immobility state and flies off as though nothing had happened.

But if you frighten the animal when it is coming up or if you frighten it when it is coming in, it stays in that immobility a longer amount of time, a much longer amount of time – particularly if you re-frighten it. So the thing is, we frighten ourselves. Normally the exiting out of immobility is time-limited – you go in and you go out. When people are coming out of immobility, if they are frightened of those sensations, that fear then puts them into immobility.

So I call it "fear-potentiated immobility."

In this step, we uncouple the fear from the immobility and the person comes out of the immobility, back into life. And, again, when they come out, there is usually a lot of activation, a lot of arousal. So when the person comes out, we have to be prepared to help them contain that sensation of arousal and then move through that, back into homeostasis, balance and social engagement. So that is the sixth step.

And the seventh step is to help them discharge and regulate the high arousal states, and they redistribute the mass of the vital energy mobilized for life-preserving action, while freeing that energy to support higher-level brain functions.

Step eight is engaging self-regulation to restore dynamic equilibrium and relaxed alertness. I like that word better than "homeostasis" because homeostasis implies a static state, and this dynamic equilibrium is always shifting. So we go into a high level of arousal, but dynamically we turn to a balanced equilibrium.

And then the ninth step is to help the person reorient in the here and now; contact the environment, the room, wherever they are - the emergency room if it is the emergency room, the recovery room if it is the recovery room – and reestablish the capacity for social engagement.

#### Credits

Typically, I write only one part of this newsletter, the introductory monologue. With the introduction, I try to set the tone and context for some of the material that follows. Occasionally, I have written longer pieces. I have tried to share some of my experience because who I am informs so much of BluesNews. After that, the content of BluesNews comes from any of the thousands of sources I encounter or from resources others have sent to me. The humor sections, while chosen by me, are often sent to me by foster parents within Bluewater Family Support Services, or they have been sent to me by Micky W, my loving partner and spouse for more than 40 years.

Anyway, I just wanted to thank everybody. As I have said previously in BluesNews, my friend's passing this past August left me wounded. As much as I believe 'its all about relationship,' this past year has sorely tested that conviction. It seemed clear that life lessons I had learned following the death of my parents needed to be revisited. To Terri J, I owe this debt. Terri reminds me regularly it is not the attitude of gratitude but the exercise of gratitude that defines us. So, this is the exercise in gratitude: I am genuinely grateful to all those who have touched my life.

Practically speaking, the exercise of gratitude also demands I give credit where credit belongs for the content of this edition of BluesNews:

Page 2: NICABM, October 2017

Page 4: NICABM, October 2017

Page 6: NICABM, November 2017

Page 7: Post, B and H Forbes, <u>Beyond Consequences, Logic and Control</u>, Orlando: Beyond Consequences Institute, 2006. pg 19.

Page 8: http://www.human-memory.net/types.html

Page 8: Dr. Bruce Perry, unknown date

Page 9: NICABM, November 2017

Page 10: NICABM, November 2017

#### THANKS!

Professional Development / InService				
Leamington	Parkhill			
1st and 3rd Wednesday	2nd and 4th Wednesday			
Sept 20	Sept 27			
Oct 4	Oct 11			
Oct 18	Oct 25			
Nov 1	Nov 8			
Nov 15	Nov 22			
Dec 8 (Christmas Luncheon)	Dec 13 (Christmas Luncheon)			

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Jan 17	Jan 10
Feb 7	Jan 24
Feb 21	Feb 14
March 7	Feb 28
March 21	March 14 (March Break)
April 4	March 28
April 18	April 11
May 2	April 25
May 16	May 9
June 6	May 23
June 20	June 13

Two Canadians are drinking in a bar. One says, "Did you know that Elks have sex 5 to 10 times a day?" "Aww, shit!" says his friend, "and I just joined the Knights of Columbus !"