Yoga for Trauma

How Trauma-Sensitive Yoga Can Help in the Trauma Recovery Process

"Yoga is more effective for treating PTSD than any medication so far."
(Bessel van der Kolk, NScience seminar , London Guys Hospital, 15 May 2005)

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Submitted to: Swami Vedantananda

Date: 6th June 2015

Introduction

Trauma and its symptoms are more prevalent in society than is often thought. Nearly half of us, that is about 6 of every 10 (or 60%) of men and 5 of every 10 (or 50%) of women experience at least one trauma in their lives. About 7 or 8 out of every 100 people (or 7-8 per cent of the population) will have post-traumatic stress disorder (PTSD, the most full-blown grade of trauma), at some point in their lives. Women are more likely to suffer from trauma: about 10 of every 100 (or 10%) of women develop PTSD sometime in their lives compared with about 4 of every 100 (or 4%) of men. This is because the most damaging forms of trauma are those conducted by one person to another, i.e. rape or sexual assault/abuse, and this is more likely to happen to females than males (US figures, National Centre for PTSD). We can begin to see from this evidence the fateful function of trauma, childhood or otherwise, to the fabric of society.

What is Trauma

Trauma happens when we have an experience that we struggle to process. It can feel too overwhelming as we experience negative emotions such as helplessness, fear, sadness, rage or shame. But primarily trauma is a physical experience of our body; we have a series of physical responses as our 'fight or flight' system kicks in to deal with the situation.

It is helpful to distinguish between stress, traumatic stress, post-traumatic stress (PTS) and post-traumatic stress disorder (PTSD). Stress is a response we have when the external pressure, event or change that we are facing feels like it is greater than our perceived ability to cope so we have a stress reaction and the sympathetic nervous system responds with the fear, fight, flight response. Traumatic stress results from a traumatic incident and is a stronger response than stress that isn't traumatic, so there is an element of overwhelm and our body-mind system has more to process. When the stress response continues after the incident it is defined as post-traumatic stress. And when it continues to levels that are higher and more persistent, as defined in the DSM-V, it is defined as post-traumatic stress disorder.

Causes of Trauma

Trauma may result from a wide range of stressors such as being in a serious accident; having surgery or surgical procedures; the break -up of a significant relationship; the discovery of a life-threatening illness or disabling condition; being in war zones or being exposed to war-related casualties; being in a major natural or technological disaster (fire, tornado, flood, earthquake, chemical spill etc); being physically punished by parents as a child before the age of 18, or threatened, so that you were very frightened, thought you would be injured or received serious injury; being attacked, mugged or beaten by anyone; being pressured into having unwanted sexual contact; having a close family member die violently ie in a serious car crash, mugging or attack; witnessing a situation in which someone else was seriously injured or killed or in which you feared you would be seriously injured or killed.

Trauma develops through the failure of the body, psyche and nervous system to process adverse events. All of us will have experienced some traumatic experiences during our life, however not everyone who has a traumatic experience ends up being traumatised. Trauma has a different impact at different ages and stages, and a child who experiences a trauma before the age of 7 years experiences more far reaching consequences than an older child or an adult, and is also more vulnerable to later trauma and being re-traumatised.

The most insidious and damaging forms of trauma occur in the context of interpersonal relationships[6] ; the most devastating being relational traumas experienced in childhood such as physical, emotional and sexual abuse. The worst type of trauma of all is childhood neglect, not just physical but emotional neglect. Hence trauma in families is more prevalent than trauma in war.

Consequences of Trauma

Trauma can have devastating consequences. The symptoms of trauma include anxiety, depression, substance abuse, mood disorders, suicidal ideas or attempts, self-harm, obsessive compulsive disorder (OCD), anorexia, flashbacks, avoidance behaviour, a feeling of being detached from other people, trouble sleeping, a feeling of frequently being 'on guard' or an exaggerated 'startle response', restlessness, distraction and trouble concentrating, irritability and outbursts of anger. However the major faculty that trauma interferes with is the ability of our higher brain to connect with a sense of meaning or purpose – what is called 'the instinct of privilege'. So traumatised people are poor at goal setting, feel like their future has shrunk or they don't have a future, have an overriding sense of purposeless or lack of meaning.

People suffering from trauma often behave in inappropriate ways, they can scare others and embarrass themselves and drive people away. Because they have no idea of where these powerful feelings that are still with them come from, they experience greater degrees of shame and self-loathing and have a sense of being out of control and becoming a 'monster' who no one can be safe with.

The Brain and Trauma

Trauma leaves people with an inability to feel fully alive in the here and now; their ability to be in the present moment with full awareness is being constantly hijacked by their limbic system and the amygdala (basal brain that does the fear, fight, flight response) in the state of high arousal, constant alert and affect (high emotional) state. In this respect the rational, executive brain has very limited capacity to control the emotional arousal or change fixed action patterns of the emotional brain. The frontal lobe shuts down, which means that trauma sufferers are constantly 'associated' in the event (reliving it) and consequently overwhelmed by feelings, sensations and emotions.

Sensory input – such as sounds, images, smells - can act as reminders of the past event, automatically stimulating hormonal secretion and activate the brain regions involved in attention and memory. When this happens trauma survivors react with irrational responses which are irrelevant, even harmful in the present. They may over-react or blow up in response to minor provocations; freeze when frustrated or become helpless in the face of trivial challenges.

The Seat of Self Awareness

Recent neuroscience research has found that the precuneus is also negatively affected [5]. The precuneus is in the back, mid portion of the parietal lobe, flopping over the inner wall of both hemispheres, and it is responsible for the most basic seat of the 'self'; from here comes the observing ego, or the "I". It is the healthy functioning of the precuneus which is associated with self-reflection and self-awareness (1). The

precuneus shows the highest rate of activity when we close our eyes and turn self-awareness inward and become aware of our self, and when taking awareness into the body, sensations and feelings (interoception). This doesn't apply when moving the body (it only applies to 'motor imagery', not movement) and is greatly reduced when we are asleep or during tasks that make no reference to the self.

Trauma and the Body

It can be seen that trauma affects the development and function of the right hemisphere of the brain including the precuneus, which together is the area of the brain that maps self-awareness, awareness of the inner states of the body. Trauma is not a mind or memory issue (as is commonly thought) but a body issue.

There is a significant amount of emotional energy that is aroused during a traumatic experience and 'The function of emotions is to take physical action' [(6)]. However in trauma, the body has not been able to 'follow through' on the necessary action. As a consequence, traumatised individuals are automatically continuing the action, or rather the attempt at taking action, which began in the trauma situation, in an endlessly repeating loop. But this cannot result in protective interaction so meaning is lost and the person loses their place in the world (6). If stopped or stuck like this the limbic system's fear, fight, flight response turns the only way it can go, inward, and an inner state of panic or hyper-arousal is maintained; the only change or sense of control that is left is that of our inner biology.

The Postures of Trauma

Our body has an impact on our emotions: the way we hold or move our body will help to suppress or express emotions. In trauma survivors the negative emotions – fear, anger, shame – massively overpower and suppress the positive emotions – curiosity, joy, gratitude etc. Typical trauma 'postures' and associated emotional states I have seen include:

- **Crumple** – the collapse response. They have given in – this is the final action of the fear-flight-flight-freeze response; when nothing else has worked, give up. Shame, sadness or guilt is the predominant emotion. Shoulders rounded, chest collapsed inward, head looking down to the floor, sighing. The person may be more stuck on the exhale.
- **Spacey** – off balance emotionally or mentally and/or somatic dissociation. Hardly breathing at all, they are out of their bodies. Posture may look somehow disjointed, they will be disconnected in other ways i.e regularly go off on a tangent in their train of thought, or be preoccupied/distracted, there may be a spacey or childlike quality to their voice. These people will be uncoordinated, and will find it hard to be aware of the sensations and feelings in their bodies.
- **Brace** – everything tightens up, hands, arms, neck, shoulders will look tense. Their face and jaw will be tight. They perhaps look ready for attack or defence – the emotion is fear or perhaps anger/rage. There is very little movement in the neck, which is perhaps pulled into the head/spine, shortened somehow, chin draw in, they may look at you from underneath their eyebrows. Breathing is frozen, with little movement because of the brace response.

- **Armour** – the body is bulked up as a defence against the damaged ego underneath, through muscular development or even obesity, this is like the body is a protective armour for someone who vows not to let the world penetrate him again or 'never will I be hurt like that again'. Breathing may be reversed breathing, the chest is puffed up to 'man up' for the attack. Anger is near the surface, as anger, rage or passive-aggressive forms of anger.
- **Startle** – predominant emotions of panic, anxiety and tension are very near the surface. Here the damaged ego is vulnerable and exposed. Breath is high, fast and shallow - hyperventilation. Eyes are wide open, frame often slight gazelle-ish, movement and speech fast.
- **Shutdown** – numbing or dissociation/depersonalisation. Presents as listlessness, apathy, anhedonia (inability to enjoy things), lacking of energy, focused on the negative and whining or moaning. May present as distracting, and cynical or overly logical and questioning everything, body will be quite rigid and uncoordinated.

There is particular interest in the muscles of the neck in trauma [3]. The sternocleidomastoid muscle is the 'muscle of curiosity', it enables the neck to move to express the emotion or state of curiosity – stretched forward, listening, alert. So the way people move, or don't move, their neck says a lot about trauma. In the emotion of curiosity the brain region of the hippocampus is active [8] , which is another key area along with the amygdala involved in processing traumatic events [10] . The hippocampus is called the 'gateway' to the limbic system [9] , it is involved in the processing and integration of memory and emotion, giving space and context to an event and putting it in proper perspective. Hippocampal activity is suppressed in trauma, so that this 'filing' process can't happen.

The Role of the Autonomic Nervous System

In trauma, the sympathetic nervous system (SNS) remains in a state of high arousal or mobilisation. The other aspect of the autonomic nervous system (ANS) that is involved in the trauma response is the parasympathetic nervous system (PNS). It is well-known by yoga teachers that the PNS influences the relaxation response and has a calming effect on mind and body, but Porges' [7] work elaborates on this, talking about the importance of 'vagal regulation' or the 'vagal brake' which is the effect that the (myelinated branch) of the PNS has on slowing the heart rate and reducing metabolic demands. This slowing or brake affects the respiratory sinus arrhythmia of the heart (RSA) – which is the tendency of the heart rate to slow down on the out-breath (i.e. relaxation takes place on the exhale) – and heart rate variability (HRV) which is the key measure of physiological coherence.

In trauma survivors the regulatory capacity of the PNS and the vagal brake is severely compromised and is likely to contribute to the problems that affect regulation and lack of responsiveness to interpersonal comfort in traumatised individuals. Poor vagal tone plays a significant role in the symptoms of PTSD and post-traumatic stress. And in order to come to terms with the past, it seems to be essential for the trauma sufferer to learn to regulate their physiological arousal and retune their autonomic regulation. In other words, to move from a fight-or-flight state, to a physiological state associated with relaxation, safety and social engagement [7] . Therefore, whilst perhaps yoga alone is often not enough to heal trauma, it is absolutely essential in helping the client shift to a calmer, physiological state from which he or she can access the psychological and somatic mechanisms and processes that are the foundations of healing trauma in body-centred psychotherapy. In contrast, the psychological mechanisms and

processes involved in the more traditional psychotherapies (talking therapy) will have little impact on trauma sufferers.

Satyananda Yoga and Trauma

We can begin to see many ways in which Satyananda yoga with a sensitive teacher and some considerations for a trauma sensitive practise, can be helpful in trauma recovery. Effective treatment for trauma needs to involve:

1. **Learning to tolerate feelings and sensations by increasing capacity for interoception.** This will strengthen hypocampal and precuneal activity in the brain and improve cortical function to help process the trauma and reduce dominance of the emotional arousal of the right hemisphere, and develop a sense of self awareness and tolerate sensations in the body
2. **Learning to modulate one's own physiological arousal or to self-regulate.** This will strengthen the vagal tone and the PNS response to increase HRV and RSA to improve self-regulation and reduce physiological arousal levels.
3. **Learning to engage in taking effective action** - to overcome the feelings of physical powerlessness and helplessness from the traumatic experience (s), thereby replacing the passive fear response with an active coping strategy. This will help to release the energy of the 'stuck' emotional response from the body.

Because the trauma survivors sense of control has been taken away rendering the individual helpless in the face of the event or experience, it is absolutely necessary that throughout the treatment the person is empowered with a sense of choice, control and volition. This requires a trauma-sensitive yoga teacher.

Room set up and environment

The room or venue is very important and needs to be different to where a general yoga class is often taught. First and foremost it needs to be quiet – it is important to minimise external noises which could trigger the alert response. The room should be safe, calm, quiet and predictable. The lighting should be not too bright, not too dark, something in between. Conditions that are too dark can trigger the trauma response. So lights should be kept on during savasana. No open, exposed windows. The teacher should minimise unplanned disturbances wherever possible.

For highly traumatised and recently re-traumatised individuals, the work will need to be done on a one to one basis as being part of a group, even a small one, is too much for them. Traumatised people are hyper sensitive to others' emotional and physiological states and their social nervous system and vagal tone is poorly functioning [(7)] which means that they are less able to interact socially or that such interaction is highly stressful for them and will negate the benefits of the practice. Certainly I believe that trauma sensitive yoga needs to be taught in small, safe groups that are closed and not open to drop in students.

Teacher attributes and qualities and teaching style

First and foremost the teacher's own somatic and emotional state is very important as trauma survivors are highly attuned to the micro changes in others' emotional states. So a high degree of self-awareness

and self-care is required of the teacher. The teacher needs to be especially attentive to the body and emotional state of the students. The teacher also needs to be capable of coping if the student is triggered into a traumatic arousal response: needs to be able to witness the distress and be there to help regulate the student's response and not be scared to hear the trauma story if the student wishes to tell it.

The teacher needs to have qualities of being present, light, open, warm, engaged, welcoming and approachable, competent with her teaching and confident and at ease in herself, but also able to invite feedback and be willing to listen and change. Conservative dress is quite important.

As most trauma results from interpersonal (familial) relationships, the trauma survivor often has a fear of intimacy. Human contact and attunement are cardinal elements of physiological self-regulation; yet the promise of intimacy evokes implicit memories of hurt, betrayal and abandonment for the trauma survivor. Hence kindness and being seen and understood by a caring teacher, instead of being calming will precipitate a reliving of the trauma. It is vital that yoga teachers are aware of this.

So the trauma-sensitive yoga teacher needs to establish with the traumatised student a physical sense of control by working on the establishment of physical boundaries, exploring ways of regulating physiological arousal and focusing on regaining a sense of being able to take effective action to protect and defend oneself. There should be no coercion, no physical correction, talking by the teacher should be kept to a minimum of simple, clear instruction.

The Language of Trauma-Sensitive Yoga

Language involves the language of inquiry and curiosity (to help build hippocampus and precuneal activity). Teachers should remember and regularly use phrases like: "notice", "observe", "allow", "be curious", "be open", "experiment", "feel". The other important type of language is to do with choice. One lady suffering from trauma shared the relief she experienced being told 'if you feel ready, if not you can opt out' so that she could execute choice in doing a posture that did not feel ok. So phrases that promote individual choice for taking effective action include: "if you like", "when you feel ready", "if you choose", and so on. Of course there will be times when simple, direct instruction is needed, such as getting into and out of postures etc.

The language used by the yoga teacher is very important – the words spoken, tone of voice, inflection. The teacher needs to cultivate in students an ability to slow down, stop, and experience each moment in time. A slow, smooth, soothing tone of voice will help that and help foster a calm atmosphere of healing. Fewer words, and concrete language that helps bring attention to visceral experience – so that students can experience what is happening in their body right now. The teacher needs to gently but clearly direct the students' attention to internal experiences while also inviting mindful moving and breathing.

The Practice of Yoga

The overall method of Satyananda yoga is a particularly appropriate type of yoga for trauma. This is because:

- Few props are used – this reduces any restraints, which could trigger trauma, and allows people to trust, accept and appreciate their own body as it is
- Less is more – fewer asanas, simple repetitive movements (ideally up to 7 repetitions, to help the high distractibility of trauma sufferers)
- Slow pace, space, pauses – encourages mindfulness, helps them find a space to stay within but pauses without any speaking shouldn't be longer than 1-2 minutes or there is a risk of 'spacing out' or dissociation
- Interoception – encouraged through the use of language to encourage feeling of bodily awareness and sensations
- Structure – a good balance of asana, pranayama and relaxation. In a typical 90 min class there is 50 mins of asana, 15 mins pranayama and 25 mins relaxation. Although in the early stages relaxation should never be too long – limit it to 10-15 mins.
- Empowering choice and reducing transference – self paced, physical boundaries set and managed, language of the teacher empowering choice.

Specific techniques from Satyananda system to mention are:

- Pawanamuktasana (PWM) series – spend a lot of time with series 1, as it is simple, safe and incredibly powerful for trauma
- Simple postures – standing, seated,
- Simple pranayamas – abdominal breathing, full yogic breath, ratio breathing, expanded lung breathing etc
- Alternate nostril breathing to balance left and right hemispheres
- Yoga nidra relaxation – stages 1, 3, 5, 8 only for a long while and build up to that over weeks. The sankalpa will be important in trauma to establish a sense of volition and empowerment
- Kaiya sthairyam meditation
- Antar mouna – first few stages
- Simple chanting
- Tratak for concentration

Challenging postures for trauma survivors will be the more prone or vulnerable postures (open, lying on back), including savasana. Savasana may need to be done propped up, or with arms crossed over chest or legs bent – by establishing the student's own sense of choice and control, any unnecessary triggering can be avoided. For many people, especially survivors of sexual abuse, hip openers will be challenging, so you will need to start with simple seated openers such as ardha titali and build up.

Goals and Suitable Yoga Interventions Related to the Trauma Postures

The table below summarises some of the goals of yoga for different types of trauma sufferers and their 'trauma posture' type and the interventions in Satyananda yoga that might apply.

Posture	Goal	Yoga Interventions
Crumple	Empowering and containing	Postures that Lengthen the spine, hold the spine upright and encourage the head to look up and open the upper body: , PWM 1 (especially neck and shoulder) and 2, moving to standing poses tadasana series, bow and arrow pose, tiryaka tadasana, kati chakrasana, meru prishthasana etc, the lizard Containing poses – ie childs pose, shashankasana Breathwork – including abdominal breathing helping connect them to core
Spacey/ off balance	Grounding, centering, awareness of body	PWM 1 and 2 Tadasana connection to feet Simple standing postures Breathing practices in standing or seated postures Seated twists, seated postures in general, bringing awareness to core and balanced movement
Brace	Opening	Breathing practices such as sun breaths, and postures that encourage deeper breathing such as hasta uttanasana, expanded lung breathing Move onto opening postures over time
Armour	Softening, unfreezing, letting go, reorganising active defences	Movement based postures done dynamically Surya namaskara
Startle	Centering, regulating hyperarousal	Pranayama – abdominal breathing, ratio breathing lengthening the exhale, ujjiyi breath, nadi shodana etc Forward bends, neck rolls
Shutdown/ Emotional numbing	Decreasing hypoarousal (numbness), coming alive again	Activating postures, standing Pranayama - abdominal breathing, full yogic breath, bhastrika, khapalabhati (according to student)

Yoga for Trauma Case Study

I managed to complete nine sessions with three trauma survivors: Rita, Darrell and Jo. Rita left the UK mid-way through to go back her home of origin in Bulgaria. Jo only came to me recently. Darrell completed the five sessions that we had available during the course of this project. The case study will focus on Darrell. Darrell had never done yoga before. (see Appendix 4 for summary table of the physical presentations, symptoms, experiences and history for each client).

Darrell's outcome was: To be able to switch off and relax more without being on guard. To be able to relax in environments I find difficult to relax in. Taking back control in an area where you haven't got control. I would feel more complete within myself, more rounded. Also to increase his flexibility and improve his lower back issue (backache) and increase strength of neglected muscle groups.

See Appendix 5 for the detail of the Yoga Programme that was undertaken with Darrell.

Summary of the Yoga Sessions

During the savasana of the first session Darrell noticed residual tension, that 'you can't quite shut out' and that it's 'happening subconsciously. During the early abdominal breathing practices he noticed that he normally breathes through his mouth – and he really liked the more 'controlled' rate through the nostrils. The practice of full yogic breath helped to correct Darrell's tendency for chest breathing where the upper respiratory muscles are used for respiration and the abdomen sucked in. Chest breathing restricts the movement of the diaphragm and lowers HRV keeping the SNS in a state of high arousal and 'on edge'.

During the early relaxation sessions, Darrell quickly learnt to switch off more: 'I was aware of all noises but they weren't distracting', 'I was more involved in what I was doing with no distractions, a couple of times I thought I could drop off' (something highly unusual for him). At the end of sessions he 'felt relaxed but also invigorated', surprise at how 'correct breathing and relaxation are entwined'. He was also really enjoying the stretching and breathing and continued his practice at home in between our sessions.

He started noticing that 'it is easy to relax and let go of tension in the relaxation'. He found that by breathing through his nostrils and focusing on the exhale he was able to take himself into the stretch without straining or forcing (for example in the lying twists) – this was an important realisation for him: that you don't necessarily have to strain or force to get a deeper stretch (effective action and better results come from doing less).

Darrell also noticed a growing sense of self awareness. 'I am becoming more aware of breathing in relation to stretch'. (again learnings about effective action, not forcing), 'as my breathing improves it is reflected in (improvements in) my stretching and relaxation'. 'Noticing how the body is interconnected and how muscles work together', 'gives you time to think about your body'

In yoga nidra, Darrell observed that he 'went really deep, switched off'. He said 'sometimes when you take a nap you can get disturbed by thoughts or images and it pulls you straight out. I sense that doesn't or won't happen with this. It's very easy to go deep and switch off'.

Darrell found his enthusiasm for yoga growing and wants to continue after our sessions. After the sessions he felt 'very good, relaxed and with a growing self-awareness'. 'as I slowly progress with the exercises and relaxation I can feel the benefit of it coming together.' Overall Darrell rated the following all as excellent: the room; the quality of my presence; the quality of my voice; the postures/practice

Other observations and comments that Darrell made include:

- 'I have felt better, it's easier to be calmer'
- On comparing yoga to exercise - 'exercise only gives you a short term fix'
- '10 mins can clear your head … think clearly, break it down'
- 'it's surprised me how quickly it began to fall into place … the mental side'
- 'I know I will continue now'

Conclusions and Recommendations

Other comments from the yoga students involved in this study include:

'I trust myself more'

'I felt chilled, comfortable, relaxed' (first time)

'I felt comfortable'

'I feel more connected to myself'

'I can control, or be in touch with my body'

'I could feel my circulation started, an opening, it was easier to breathe'

'I could feel my body awakening, like it wants more movement'

'its good to concentrate, not to do it as you would normally … like the balancing is trying to break in'

It is clear that trauma-sensitive yoga as outlined in this paper, helps to strengthen vagal tone and calm physiological and emotional arousal, providing students with self-regulation tools to manage their arousal levels. It also helps to strengthen the brain structures involved in emotional arousal and self-awareness as well as those needed to process the traumatic event in mind and memory. It improves students' sense of volition and control and enables them to take effective action to regain a sense of empowerment after having been rendered powerless. It also helps to release the trapped emotional energy of the emotional response that is still stored in the body, hence reducing or eliminating the repeated loop of hyper-arousal.

Satyananda yoga is the most suitable form of yoga for helping trauma survivors. However it does require additional training in the sensitivities required to teach trauma-sensitive yoga.

Bibliography

1. **'Can States of Consciousness be mapped in the brain?'.** www.thebrain.mcgill.ca
2. Geuze, Vermetten, de Kloet, Westenberg. **Precuneal activity during encoding veterans with PTSD**. Prog. Brain Res. 2008. Vol 167. Pp 293-7
3. Bessel Van der Kolk. (2014). **The Body Keeps the Score: Mind, Brain and Body in the transformation of trauma.**
4. D. Emmerson & E. Hopper. (2011). **Overcoming Trauma through Yoga : Reclaiming your Body**
5. **Traumatic Stress: Therapeutic Implications of Neuroscience Research.** A seminar with Dr Bessel van der Kolk, London Guys Hospital, 15 May 2005.
6. Van Der Kolk. **Clinical Implications of Neuroscience Research in PTSD.** New York Academy of Sciences Annals. 2006. 1071 pp 277-293.
7. Porges, S. (2011). **The Polyvagal Theory: Neurophysiological Foundations of Emotions, Attachment, Communication, Self-Regulation**.
8. Daisy Yuhas. (October 2, 2014). **Curiosity Prepares the Brain for Better Learning: Neuroimaging reveals how the brain's reward and memory pathways prime inquiring minds for knowledge.** http://www.scientificamerican.com/article/curiosity-prepares-the-brain-for-better-learning/
9. Reiser, M. (1993). **Memory in Mind and Brain.**
10. Rothschild, B. (2000). **The Body Remembers: The Psychophysiology of Trauma and Trauma Treatment.**

APPENDICES

APPENDIX 1 - Trauma Symptoms Checklist

Following an unusual and traumatic event, it is common to have a range of unusual symptoms. It is a normal reaction to an abnormal experience.

Name: **Date:**

Date of incident:

Please answer the following questions by √ Yes or No.

1. Have you experienced or witnessed an event that caused fear, helplessness, or horror? ☐No ☐ Yes
2. Do you re-experience the event through repeated, thoughts; distressing memories; or dreams? ☐No ☐ Yes
3. Do you re-experience the event through flashbacks (feeling as if the event were happening again) or a sense of reliving it? ☐No ☐ Yes
4. Do you experience intense physical and/or emotional distress when you are exposed to things that remind you of the event? ☐No ☐ Yes
5. Do you avoid thoughts, feelings or conversations about the event? ☐No ☐ Yes
6. Do you avoid activities, places, or people who remind you of the event? ☐No ☐ Yes
7. Are you unable to remember important parts of the event? ☐No ☐ Yes
8. Have you lost interest in your usual activities in your life? ☐No ☐ Yes
9. Do you feel detached from other people? ☐No ☐ Yes
10. Have your emotions changed since the event? ☐No ☐ Yes
11. Do you feel as if your future has shrunk (for example, you don't expect to have a career, marriage, children or a normal life span)? No Yes
12. Do you have trouble sleeping? ☐No ☐ Yes

13. Do you feel more irritable, or have outbursts of anger? ☐No ☐ Yes

14. Do you have problems concentrating? ☐No ☐ Yes

15. Do you frequently feel 'on guard'? ☐No ☐ Yes

16. Do you experience an exaggerated 'startle response'? ☐No ☐ Yes

17. Has this recent traumatic event brought back past unpleasant memories? ☐No ☐ Yes

18. Have you had major life 'upsets' in the last 3 years? ☐No ☐ Yes

Thank you for completing this checklist inspired by a 'Facts for Health' online checklist and modified for PHT's Staff Support Service.

APPENDIX 2 – BRIEF TRAUMA QUESTIONNAIRE (see attached)

APPENDIX 3 – SESSION FEEDBACK

Session Feedback

1. What did you most enjoy?
2. What did you least enjoy? (be honest, constructive feedback very welcome)
3. What learnings did you have about your self?
4. How did you feel before the session?
5. How did you feel after the session?
6. What do you think the benefits of the session to you were?
7. How would you rate the following:
    a. The space/room: very poor / poor/ neutral / good /excellent
    b. The quality of my presence: very poor / poor/ neutral / good /excellent
    c. The quality of my voice: very poor / poor/ neutral / good /excellent
    d. The postures/practice: very poor / poor/ neutral / good /excellent
8. What would you like more of?
9. What would you like less of?

APPENDIX 4 – CLIENT SUMMARY TABLE

	Rita	**Darrell**	**Jo**
Physical presentation	Slim, moves quickly, a lot of energy On edge talks a lot A lot of nervous smiling Hyperarousal, on guard, jittery, nervous Breathing is rapid and shallow	Thick muscle bulk ('armoured') Calm and controlled but intense eyes and some signs of tiredness Chest breathing with rigid and tense neck and upper body muscles	Very slim, moves in a tired, but 'wired' way On edge, very nervous – over reacts to small noises Hardly seems to breathe at all - frzen Doesn't smile a lot – tense, sits on edge of seat, upper body rigid and tense Hyperarousal, on guard, jittery, nervous
Symptoms	Finds it hard to concentrate, tendency to depression, can't stick at things. Attachment issues playing out in relationships and possible borderline personality disorder. Mild anxiety. Tendency to self-medicate through alcohol. Palpitations.	A sense of being on guard, unable to relax Some anger and aggression issues	High levels of anxiety. Some depression Increasing symptoms of OCD. Inability to focus or concentrate. Inability to set goals or make decisions. Distressing dreams and thoughts about the event. Intense emotional distress thinking about the event. Avoidant behaviour. Loss of interest in life. Feeling detached from others. Feels as if future has shrunk. Irritable and outbursts of anger. Problems concentrating and feels 'on guard' with exaggerated 'startle response'.
Experiences	Abuse in childhood – difficult relationship with mother	Was a war veteran in the Royal Marines with experience in war zones inc Pakistan (answered yes to Q1, 6, 8, 9, 10 of Appendix 2) Some trauma in childhood – nasty accident on bike aged 8 and sexually inappropriate behaviour (non contact) with teacher and scout leader at age 7	Has Crohn's disease and two traumatic operations and invasive medical procedures/medication

Personal History	Single - 32 Currently working as a barmaid, underachieving according to education, can't stick at jobs	Married with children - 54 Self-employed for 15 years in own security guard business	Single mother - 38 Works as teaching assistant. Has been off work for 3 months with symptoms
'Traumatic antecedents' Questions (page 2)	Didn't assess	Yes to all Positive resilient childhood	Haven't assessed yet Some ongoing family issues with parents/sister
Trauma severity	Didn't assess	Only 1 out of 18 trauma symptoms checklist (appendix 1) Frequently feels 'on guard'	16 of 18 trauma symptoms checklist (appendix 1)
Outcome		To be able to switch off and relax more without being on guard To be able to relax in environments I find difficult to relax in Taking back control in an area where you haven't got control I would feel more complete within myself, more rounded Also to increase his flexibility and improve his lower back issue (backache) and increase strength of neglected muscle groups	

'traumatic antecedents' include:

- Did the person get affection as a child in their family of origin?
- Was there someone who recognised the person as a special person?
- Was there anyone you felt safe with growing up?

Initial breathing assessments

This wasn't done for all clients but generally people with trauma tend to present as breathing:

- High chest, 2 sec breath cycle, easier to breathe in than out (hyperventilation)

A pattern that propagates the high SNS/low PNS balance, hyper-aroused state.

APPENDIX 5 – Yoga Plan/Programme – Darrell

- Issues to include – back problems, muscular; muscle bulk and some flexibility issues associated with upper body bulk; balancing muscle strength

	Week 1 – 19 March	**Week 2 – 31 March**	**Week 3 – 7 April**	**Week 4 – 10 April**	**Week 5 – 21 May**
Aim/ goals	Grounding and relaxation. To become aware of the connection with the body and the feeling sensations in the body. To feel calmer through breathing and awareness. To learn how to relax tension in the body and feel more relaxed	Grounding, relaxation and centering. To become aware of the body and sensations. To feel grounded and connected to the body. To learn to use felt sensations to create more choice. To practise releasing tension	Develop ability to withdraw the senses and calm the mind. Develop flexibility in spine and deep hip flexors. Understand the concept and importance of acceptance of here and now sensations in the body. Increase ability to switch off and relax	To be more fully in the body, listen to the body. To increase sensitivity and awareness of the body. Asana for back and lateral muscles	To withdraw from external (alert) to internal (calm)
Asana	Savasana (tense and release) PWM 1 - sitting Supta udarakarshanasana Jyestikasana (modified) to practise abdominal breathing	Savasana – differential relaxation Supta udarakarshanasana (lying twists) PWM 1 – sitting Shava udarakarshanasana Seated sun breaths Majari asana Shashankasana Tadasana Vrksasana/eka prada pranamasana Rag doll forward bend	Savasana – extend exhale, 1:2 ratio Supta pawanamuktasana Shava udarakarshanasana Leg raises Pretzel posture- (pigeon on the back) PWM 1 sitting – select a few Nauchalasana Chakki Chalasana Majari asana Tadasana Dwi konasana Tiryaki tadasana Kandarasana	Savasana Shava udarakarshanasana Pada sanchalasana Nauchalasana Chakki chalasana Naukasana Kashtha takshanasana Dwi konasana Trikonasana Cobra	Savasana – extend exhale, 1:2 ratio, in- I am here, out – I am letting go Kandarasana – 2 variations Shava udarakarshanasana Pretzel twist Rope pulling Nauchasanchalasana Tadasana Standing shoulder rotations Dwi konasana Trikonasana Savasana paschimottanasana
Pranaya ma	Abdominal and thoracic breathing lying on back with knees bent	Full yogic breath Voo chanting – making a long ‘vooooo’ sound on exhale	Lack of time	One lung breathing	One lung breathing Ratio breathing – 1:1:1:1
Relaxatio n	Guided relaxation	Brief relaxation	Yoga nidra – stages 1, 3, 5, 7 Using sound to help stage 1 and 7	Short relaxation	Yoga nidra – stages 1, 3, 4, 5, 7