

A Review of Yoga as an Aid in the Treatment of Trauma

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Summary

The following review includes publications from magazine articles interviewing trauma survivors, Yoga Teachers, Researchers and Clinicians to published peer reviewed journal articles. The literature supports the view that Yoga can make a contribution to the recovery process for trauma survivors.

Trauma aware yoga is not a therapy or a replacement or substitute for a treatment protocol.

Extent of Trauma in Society

Briere and Scott (2013, p. 8) define trauma as the result of an event that is extremely upsetting, temporarily overwhelming the individual's inner resource. Trauma can produce lasting psychological symptoms. The Diagnostic and Statistical Manual of Mental Disorders, 5th edition (DSM V) version of trauma should be used when making a formal diagnosis.

Events that may lead to trauma include; child abuse, mass interpersonal violence, natural disasters, large scale transportation accidents, fire, motor vehicle accidents, rape and sexual assault, stranger physical assault, intimate partner violence, sex trafficking, torture, war, witnessing or being confronted with the homicide or suicide of another person, life threatening medical conditions and vicarious traumatising (Briere and Scott, 2013, pp 8-17).

There has been no comprehensive research to document the extent of trauma within the total population. As a guide, one in five women have been raped at some time in their lives and up to twenty per cent of men have been sexually abused as children. (Briere and Scott, 2013, p.106). It is estimated that between six and thirty one per cent of American war veterans are effected by combat related Post Traumatic Stress Disorder (Australian Centre for Posttraumatic Mental Health, 2011, p8)

The recovery from trauma can vary between short term and lifetime in duration and is frequently unrecognised until Post Traumatic Stress Disorder (PTSD) develops.

Post Traumatic Stress Disorder is formally diagnosed by a clinician when a person has experienced an event in which their life, physical safety, or physical integrity or another person was threatened or actually damaged; and the person must have experienced intense fear, helplessness, or horror in response; continue to re-experience the traumatic event after it is over; seek to avoid reminders of the event; and exhibit signs of persistent arousal. (Diagnostic and Statistical Manual of Mental Disorders, 5th edition)

The Influence of Trauma Aware Yoga

A trauma aware yoga class provides the opportunity for participants to experience:

- a safe environment,
- learning to be present,
- practice making choices,
- taking effective action,
- creating rhythms,
- sensing their spatial orientation,
- increasing and decreasing the intensity in muscles and
- connecting with the body through breath.

This activity assists the treatment of trauma by:

- reducing; autonomic sympathetic activation, muscle tension and blood pressure and improving neuroendocrine and hormonal activity (Emerson, Sharma, Chaudhry and Turner 2009, p. 124),
- decreasing physical symptoms and emotional distress (Emerson et al, 2009, p. 124).

Personal Stories as Evidence of Yoga as Beneficial in the Treatment of Trauma

In an article by Willis (2007), Sara retold her story as someone who experienced a violent relationship with her ex husband, saying that the practice of Yoga helps her face her ex husband in court each time he violates a restraining order.

Pollack (2010), describes Samantha's experience of 2007 when stationed in Iraq with her US Army National Guard Unit, assigned very dangerous and stressful military police work. On her return home, Samantha remained hyper vigilant. Fourth of July fireworks were particularly difficult, often resorting to alcohol before engaging with others. Suffering persistent insomnia, she had nightmares of explosions, being shot at, or of her vehicle overturning. It was difficult to shed the feeling that every action had life or death consequences. Subsequently through Yoga, Samantha began to regain her confidence.

Pollack (2010), also highlights Paul's experience of serving as an artillery-man in Iraq. After he returned to his former life as a Boston fire fighter in 2006, a doctor diagnosed him as having a traumatic brain injury and PTSD. He responded to everything the way a child would. "There was no thought process," he says, "I'd just react." After struggling with PTSD for several years, Paul took a Yoga class, "I felt more centred and relaxed," he says. "From there I just got hooked on it. It's what worked on me. Since I have started Yoga I've gotten more productive. I started seeing a counsellor again. I am able to talk about my problems whereas before, I wanted nothing to do with it. It seems like I'm not as angry after I do Yoga. I'm able to function more in regular life."

Calhoon (2013), quotes Ezekiel's (Marine Corps Veteran), experience of Trauma Sensitive Yoga, "It allows me to redirect my energies from thoughts to feelings. The PTSD I started with is not the PTSD I have today. This practice enables me to slow down and see what my issues are with combat. You get so bogged down with emotions and thoughts all day long and Yoga allows me to transcend that." Ginger, Army Veteran, comments "I focus on the moment and it instantly relieves my anxiety."

Research

Dr Judith Herman, (as cited in Sparrowe, 2011 p 49) reports on Professor of Clinical Psychiatry at Harvard University explains, that people who have suffered childhood trauma often display a cluster of side effects that include, inability to control emotions, distrust of body or unable to form meaningful loving relationships. Dr Herman notes that people with complex PTSD respond best to body-based therapies, coupled with psychotherapy, because traditional "talk" therapy alone can dredge up old memories and reignite the pain all over again. While the mind may spend countless hours reliving the event and retelling the tale, it cannot undo the effects of what happened, the terror, rage, helplessness and depression that then manifests in the body.

Bessel van der Kolk, (2006, p 285), examined the effect of Yoga on PTSD symptoms. Specifically the research examined Heart Rate Variability (HRV), noting that Lower Heart Rate Variability (HRV) is associated with anxiety and depression, vascular disease and increased mortality, while high HRV is associated with positive emotions and resistance to stress. To test the hypothesis that Yoga can increase HRV a custom version of the MEDAC System/3 was developed and used to monitor HRV during a course of eight sessions of

Yoga. Data was collected for 250 clients, concluding that Yoga significantly improved PTSD symptomatology.

Cabral, Meyer and Ames (2011), completed a meta-analysis studying the effect of Yoga on psychiatric disorders. The data was abstracted and analysed for ten eligible trials using a random-effects model methodology.

The study concluded that Yoga;

- has a significant positive effect as a complementary treatment for psychiatric disorders,
- enhances the connection between the mind and the body,
- is effective in reducing symptoms of depression and anxiety,
- has few contraindications and few side effects.

The overall pooled effect size was -3.25 (95% confidence interval, -5.36 to -1.14, $P = .002$) indicating that yoga-based interventions had a large and significant effect on reducing psychiatric symptoms when used as an adjunct treatment for anxiety, depression, schizophrenia or PTSD.

The study did not allow for gender differences due to missing data and the study did not examine differences within each psychiatric disorder due to the lack of studies conducted for several of the disorders.

In preliminary results, a randomized controlled study by the Justice Resource Institute (2007), found a short term Yoga program was associated with reduced trauma symptoms in women with PTSD. 64 women, 18-58 years old with chronic, treatment un-responsive PTSD, were randomly assigned to 10 weeks of trauma Informed Yoga classes or a Control Condition, Women's Health Education class. At the post treatment assessment, the Yoga Group exhibited statistically significant decreases in PTSD symptoms compared to the Control Group. 16 of 31 (52%) of participants in the Yoga Group no longer met the criteria for PTSD compared to 6 of 29 (21%) in the Control Group.

Dave Emerson, Director of Yoga Services at the Trauma Centre at Justice Resource Institute in Brookline, MA, USA commented in an interview with Douglass (2012, p 24) that "While we are just beginning to develop a clear model as to why Yoga works, what we do know is that Yoga does work."

Conclusion

There is substantial research and anecdotal evidence that supports the hypothesis that Yoga can make a contribution to the recovery process that people engage in following exposure to trauma.

Trauma Sensitive Yoga Australia is a group of Yoga teachers interested in supporting clinicians and Yoga teachers who work with traumatised clients and would like to enhance the client's recovery from trauma through trauma Aware Yoga practices.

One day informative seminars are held for Yoga teachers and Clinicians.

If you would like more information visit the web site,
<http://www.traumasensitivelyogaaustralia.com>, alternately we can be contacted by e-mail at:
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Bibliography

American Psychiatric Association, Diagnostic and Statistical Manual of Mental Disorders, 5th edition, Washington DC, American Psychiatric Association Press.

Australian Centre for Posttraumatic Mental Health (2011), *Summary of the Traumatic Stress and Military Mental Health Literature: 2010*.

Briere, J. N. and Scott, C (2013). *Principles of Trauma Therapy*, Sage Publications, Los Angeles.

Cabral, P. BA., Meyer, H.B. BA., Ames, D. MD., (2011) Effectiveness of Yoga Therapy as a Complimentary Treatment for Major Psychiatric Disorders: A Meta-Analysis, *Primary Care Companion CNS Disorders*. 13(4)

Calhoon, Y. (2013) *Warrior One*, United States Department of Veterans Affairs.

Douglass, L. PhD (2012) Yoga Teachers as Part of the Clinical Team, An Interview with David Emerson, *Yoga Therapy Today*, Summer 2012.

Emerson, D. E-RYT, Sharma, R. PhD., Chaudhry, S. Turner, J. (2009). Trauma-Sensitive Yoga: Principles, Practice and Research, 2009, *International Journal of Yoga Therapy*, No 19.

Justice Resource Institute (2007), *Yoga as a Complementary Treatment for Chronic PTSD*, retrieved from http://www.traumacenter.org/research/yoga_study.php

Pollack, N. (2010) Warriors at Peace, *Yoga Journal*, August, issue 230

Sparrowe, L (2011) Transcending Trauma, *Yoga International*, Fall 2011, 49

van der Kolk, B. A. MD. (1994). The Body Keeps the Score: Memory & the Evolving Psychobiology of Post Traumatic Stress, *Harvard Review of Psychiatry* 1/5.

van der Kolk, B. A. MD. (2006) Clinical Implications of Neuroscience Research in PTSD, 2006, *Annals New York Academy of Sciences*. 1071, 277-293

Wills, D. K. (2007) Healing Life's Traumas, *Yoga Journal*, retrieved from www.yogajournal.com/health/2532

Additional Reading

Aarhus University (2012, August 17) War is not necessarily the cause of Post Traumatic Stress Disorder, *Science Daily*, retrieved from www.sciencedaily.com/releases/2012/08/120817135532.htm

Ahimsadhara (2010) From War to Peace, *Australian Yoga Life*, December-February

Barton, E., MA., (2011) Movement and Mindfulness: A Formative Evaluation of a Dance/Movement and Yoga Therapy Program with Participants Experiencing Severe Mental Illness, *American Dance Therapy Association*, 33/157-181

Brown, R.P., Gerbarg, P. L., (2009) Yoga Breathing, Meditation, and Longevity, *Annals New York Academy of Sciences*, 54-62.

Bryant, R. A. PhD., O'Donnell, M. L. PhD., Creamer, M. PhD., McFarlane, A.C. MD., Clark, C. R. PhD., Silove, D. MD. (2010), The Psychiatric Sequelae of Traumatic Injury, *Am J Psychiatry* 167:312-320.

Cukor, J., Spitalnick, J., Difede, J., Rizzo, A., Rothbaum, R. O., (2009) Emerging Treatments for PTSD, 2009, *Clinical Psychology Review*, 29, 715-726

Davey, H., PhD (2011) Inside the Mind of a War Vet, *The International Association for Psychoanalytic Self Psychology*, retrieved from www.iapsp.org/eforum/11_huffington_01.php

Descilo, T., Vedamurtachar, A., Gerbarg, P. L., Nagaraja, D., Gangadhar, B. N., Damodaran, Adelson, B. N., Braslow, L. H. C Marcus, Brown, R. P., (2010), Effects of a Yoga breath intervention alone and in combination with an exposure therapy for post-traumatic stress disorder and depression in survivors of the 2004 South East Asia Tsunami, *ACTA Pyschiatric Scandinavica*, 289-300

Douglas, L., (2009) Yoga as an intervention in the Treatment of Eating Disorders: Does it help? *Eating Disorders: The Journal of Treatment & Prevention*, 17/2, 126-139

Emerson, D., Hopper, E., PhD., (2011) *Overcoming Trauma through Yoga*, North Atlantic Books, Berkeley.

Gordon, R (2007), Thirty Years of Trauma Work: Clarifying and Broadening the Consequences of Trauma, *Psychotherapy in Australia*, 13/3.

Luxenberg, T. PysD., Spinazzola, J. PhD., van der Kolk, B.A. MD., (2001) Complex Trauma and Disorders of Extreme Stress (DESNOS) Diagnosis, Part One: Assessment, *Directions in Psychiatry*, Volume 21, Lesson 25.

Luxenberg, T. PysD., Spinazzola, J. PhD., Hidalgo, J. MD., Hunt, C. PsyD., van der Kolk, B.A. MD., (2001) Complex Trauma and Disorders of Extreme Stress (DESNOS) Diagnosis, Part Two: Treatment, *Directions in Psychiatry*, Volume 21, Lesson 26.

Morley, J., Inspiration and Expiration: Yoga Practice through Merleau-Ponty's Phenomenology of the Body, 2001, *Philosophy East and West*, Vol 51 No 1, 73-82

Spinazzola, J., PhD., Rhodes, A.M., Emerson, D., Earle, E., Monroe, K., (2011) Application of Yoga in Residential Treatment of Traumatised Youth, *Journal of the American Psychiatric Nurses Association*, 431-444, retrieved from jap.sagepub.com/content/17/6/431

Stoller, C. C., Greuel, J. H., Cimini, L. S., Fowler, M. S., Koomar, J. A., (2012) Effects of Sensory-Enhanced Yoga on Symptoms of Combat Stress in Deployed Military Personnel, *The American Journal of Occupational Therapy* , 66/1,59-68

Sykes Wylie, M. PhD., (2004) The Limits of Talk, 2004, *Psychotherapy Networker*

Sykes Wylie, M., PhD. (2004) Using Our Bodies to Get to the Heart of the Matter, *Psychotherapy Networker*

Sykes Wylie, M., PhD. (2010) The Long Shadow of Trauma, *Psychotherapy Networker*

Zucker, M. PhD., Spinazzola, J. PhD Blaustein, M. PhD., van der Kolk, B. A. MD, (2006) Dissociative Symptomatology in Posttraumatic Stress Disorder and Disorders of Extreme Stress, 2006, *Journal of Trauma and Dissociation*, 7.

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