

## TRAUMA-SENSITIVE YOGA IN PUBLIC PSYCHIATRIC SERVICES: INNOVATIVE CLINICAL MODEL FOR VETERANS WITH PTSD

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### Abstract

Many veterans with PTSD fail to gain significant improvement through trauma-focused therapies or other cognitive evidence-based therapies that are offered in public psychiatrist services. As a result, many veterans who are in the care of the public psychiatric system do not enjoy a sufficient improvement in their condition. This situation leaves both the patients and professionals in distress and creates a major load on the public psychiatric systems. One of the reasons for veterans' difficulty to benefit from treatments is an unregulated and overstimulated nerve system, that cannot tolerate the cognitive and emotional efforts demanded by these treatments. At the same time, there is an increasing body of knowledge on body-mind interventions for PTSD that address the hyper arousal of the sympathetic nerve system (SNS) and support regulation. However, these interventions are yet to be recognized by mainstream therapists and the public services, either as standalone interventions or as supporting therapy, enabling the more "traditional" therapies. This study will present an innovative therapeutic intervention that consist of short-term group of trauma-sensitive yoga (TSY) for veterans with PTSD, that took place between 2020-2022 in public psychiatric outpatient clinic in general hospital in Israel. Preliminary findings of this qualitative study show 6 main themes among participants: 1. Improved regulation of the sympathetic nerve system. 2. Acquirement of practical tools for stress-release. 3. Reconnection to supportive resources and using them in daily life. 4. Improvement in quality of life and daily functioning (e.g., sleep, memory, concentration). 5. Strengthening bodily awareness, hence consolidating sense of self-agency. 6. Improving illness management and treatment adherence. These findings demonstrate that TSY can be a promising supplementary intervention within public service that promote improvement in the client condition hence his ability to benefit from other treatments offered him. This study demonstrates the possible efficacy of using body-mind interventions with PTSD veterans who are clients of public services. Combining novel approaches within standardized care can increase the effectiveness of the latter, in clinical situations where success rates are limited and need to be better address.

**Keywords:** Veterans, trauma, trauma sensitive yoga, PTSD, psychiatry services.

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### 1. Introduction

Evidence-based therapies are suggested for veterans dealing with Post Traumatic Stress Disorder (PTSD) in public services, yet many avoid therapeutic opportunities or drop out without any improvement (Steenkamp, Litz, Hoge, & Marmar, 2015). As a result, many veterans who are in the care of the public psychiatric system do not enjoy a sufficient improvement in their condition. This situation leaves them in distress and creates a major load on these services. Hence, it is necessary to develop new therapeutic approaches that can better serve this population's needs (van Der-Kolk, 2014). Mind-body interventions (e.g., meditation, yoga) are receiving increasing research attention and support as alternative interventions in this field (Cramer, Anheyer, Saha & Dobos, 2018). However, these interventions are yet to be explored and recognized by mainstream therapists and the public services.

Within large body of evidence examining yoga as an adjunctive therapy for PTSD, a smaller number of studies focus on trauma-sensitive yoga (TSY) (Kelly, Evans, Baker, & Taylor, 2018). In these studies, TSY has been shown to have therapeutic effects on PTSD symptoms, mainly regulation of neuropsychological and emotional functioning (Kelly et al., 2018). Recent meta-analyses of TSY studies indicate that results for TSY are promising, in some cases with effect sizes comparable to psychotherapeutic and psychopharmacologic approaches (Zaccari et. all, 2020).

However, TSY-based interventions are not yet acknowledged by public psychiatric services. The purpose of this work is to present an innovative clinical model for veterans diagnosed with PTSD, operated within public psychiatric settings in Israel. The main driver for creating this model was to promote improvement in clients' conditions in the micro-level and improve efficacy of the public services in the macro-level.

## 2. Trauma sensitive yoga for veterans with PTSD

Yoga is an ancient body-mind practice, originally aimed towards spiritual transcendence. The meaning of the word yoga is "merging" or "union". The practice of yoga is an exploration of connections and relationships of mind and body as well as a path to experiencing other means of connection (e.g., connection to one's own body, connection between different body parts, connection between body to gravity and space etc.) (Desikachar, 1995).

This direct somatic experience of union has the potential to support the experience of bringing together varied aspects of the mental, emotional, and spiritual self. These domains become significantly damaged by trauma and therefore make Trauma Sensitive Yoga a viable approach to supporting those who suffer from PTSD. (Stoller, 2019; Tucker, 2021)

Trauma Sensitive Yoga (TSY) integrates "top down" and "bottom up" processes (van der Kolk, 2014). "Top-down" relates to the ways thoughts and beliefs influence sensorimotor experiences and autonomic functioning (e.g., observing the breath in meditation). "Bottom up" relates to the ways sensorimotor activities can influence and generate emotions and cognitive processes. (e.g., slowing down the breath and noticing its effect on ruminative thoughts).

Whereas traditional talk therapies use mostly cognitive and emotional interventions, yoga offers somatic based interventions (e.g., breathing, movement, vocalization, touch) as well as cognitive interventions (e.g., concentration, mindfulness, meditation). These two directional pathways - the somatic and the cognitive components - are relevant especially with symptoms of PTSD which are mainly intrusion, avoidance, alterations in cognition and mood and alterations in arousal and reactivity (Taylor, Goeheler, Galper, Innes & Bourguignon, 2010).

TSY has several guiding principles: 1. cultivating a sense of safety, 2. regulating the neuroendocrine system and 3. re-establishing a sense of agency and choice. (Cramer et al., 2018). The first principle is Safety. People with PTSD are often experiencing the world as unsafe. The practice of TSY is focused on creating a sense of safety in several aspects: A. The setting of the practice (clean and neutral physical space, predictable and structured process of training); B. Relationship with the teacher, who is a qualified and experienced TSY teacher; C. Safe group environment (practicing within "sangha"- a yogic term meaning a community of people sharing a mutual path); D. Safety in the body: During TSY classes participants are guided repeatedly to consciously pay attention to sensations of stability, support, safety and ease in their body. The practice of yoga allows the participants to experience their strength, flexibility, coordination, and their balance, which effect their perception of safety (van der Kolk, 2014). Guided imagery of safe place to return to as well as identifying postures and breathing techniques that provide the experience of a safe place within their bodies are explored (Stoller, 2019).

The second principle is regulating the autonomic nervous system (ANS): "Trauma survivors chronically respond to both ordinary and extraordinary challenges with defensive behaviors that interrupt the functioning of the cortical and subcortical circuits responsible for self-regulation, maintaining a coherent sense of self, and connecting with others...Common expressions of this dysregulation include irritable or aggressive behavior, reckless or self-destructive behavior, hypervigilance, exaggerated startle response, problems with concentration, and sleep disturbance" (Moore & Libby, 2018, pp. 109). Varied aspects of the practice of yoga are associated with regulating and balancing the ANS. The most direct impact on the ANS is through breathing practices ('pranayama'). Others are movement combined with breath, (asana) the pendulation between active and passive postures, relaxation, chanting, meditation, and social interaction. Yoga practice may support a more adaptive use of the ANS and may also support a faster recovery from a defensive response- coming back to a baseline more quickly after triggering stimulation. (Moore & Libby, 2018).

Re-establishing a sense of agency is the third principle of TSY. "Agency starts with what scientists call interoception, our awareness of our subtle sensory, body-based feelings: the greater that awareness, the greater our potential to control our lives. Knowing *what* we feel is the first step to knowing *why* we feel that way. If we are aware of the constant changes in our inner and outer environment, we can mobilize to manage them... This is why mindfulness practice is a cornerstone of recovery from trauma" (van der Kolk, 2014, pp. 97).

Yoga is a mindfulness-based practice which encourages a non-reactive awareness to internal and external stimuli. The gradual ability to contain unpleasant sensation is expanding the "window of tolerance", builds resiliency and regulates the ANS, as well as cultivating their sense of agency.

To sum up, trauma sensitive yoga can promote rehabilitation and coping with PTSD (Kelly et al., 2018; Zaccari et. all, 2020), however it is not yet integrated into mental health public services. This work will present a clinical model for group intervention within psychiatric outpatient clinic in Israel.

### **3. Method**

As this study focuses on pioneer field of combining TSY with psychiatric and psychotherapeutic treatments in public service, its research paradigm was chosen to be qualitative. In this preliminary study 35 Israeli male veterans, diagnosed with PTSD, participated in a short-term TSY group in a public psychiatric outpatient clinic in general hospital between 2020-2022 (across 6 groups). Each group consisted of 8 weekly meetings, 1 hour-long each. The meetings included guided and structured TSY practice led by professional yoga therapist and assistance (there was no open group sharing). All participants were under psychiatric care and most of them had another therapeutic treatment (individual, group, couple etc.). Qualitative data was collected individually during and after group meetings in which participants reflected on their personal therapeutic process within the group and in their daily life. Another source of data was the participants' therapists and psychiatrists, who documented their patients' condition before, during and after the TSY group.

### **4. Findings**

Participants' experiences and their therapists reports were categorized and conceptualized into 6 main themes.

#### **4.1. Improved regulation of the sympathetic nerve system**

Participants shared a significant sense of calmness and ease during the TSY practice. They described it their own words: "an experience I have no access to, unless practicing yoga", "a reminder to a quality within me that I almost forgot was there". After a relaxation a participant reflected: "I didn't want the relaxation to end... For few moments I felt as if everything is ok and there's nothing wrong with me". Some participants reported shorter episodes of flashback and quicker recovery. A Psychiatrist from the outpatient clinic reported: "Almost all the patients who were in the yoga group said that it really helps them to relax... It has a strong effect for several hours after."

#### **4.2. Acquirement of practical tools for stress-release**

Participants reported they use practical tools for stress-release and self-regulation they were given during the practice on a regular basis (e.g., breathing technics, guided relaxation recordings, specific body postures). Many participants use audio guided relaxation (recorded by the group facilitator whom her voice is familiar) before going to sleep. Some of them use yogic breathing techniques during times of anxiety and unease such as when waking up at nights or while driving. One participant shared a shift in his anxiety attacks while driving. Now he can recognize his physiological arousal, and instead of calling an ambulance he puts his hands in specific posture ("home base" position), slow down his breathing until he was calm again and able to get back to driving. Another participant reported using tapping on his body and using a vigorous standing posture before going into a job interview. A Psychiatrist described: "Those clients from the TSY group, who managed to practice in a daily routine, use it in moments of distress. It helps them to move on."

#### **4.3. Reconnection to supportive resources**

Participants reconnected to various of supportive resources (Levine, 1997) e.g., grounding, gratitude. At the end of a session that focused on feet and grounding through different postures, a participant shared: "I feel surprisingly good... I was never guided to bring attention to my feet... now I can perceive stability through my legs". This direct somatic experience continued to be part of his everyday life. Another form of resources was introduced through a repeated practice of gratitude at the end of each session. Participants were guided to think of one thing they feel grateful for, e.g., a person, a place, a quality of themselves. After working with this image many of them reported a sensation of relaxation, calmness, and easeful breathing.

#### **4.4. Improvement in quality of life and daily functioning**

Participants reported a positive effect on physical and mental functioning, e.g., their ability to fall asleep, especially those who deliberately practiced breathing and relaxation techniques prior to their bedtime. One participant reported that better sleep made him more concentrated and regulated at work, and as a result he got promoted.

#### **4.5. Strengthening bodily awareness, hence consolidating sense of self-agency**

Participants in the TSY group reported that becoming aware of their body is very significant experience. They describe it as a shift from "not knowing where my body is" to "feeling my body presence". This bodily awareness supports their sense of being grounded, safe and attuned to their own needs. These abilities enhance their sense of self and self-worth. They experienced "empowerment" and "a sense of having control on my life". Few of them reported decreasing of using sedatives and medical cannabis, as they can now better tolerate their sensations and physiological activation.

#### **4.6. Improving illness management and treatment adherence**

TSY group participants showed improvement in their adherence to other therapies and mainly their individual psychotherapy. They shared their yoga experiences with their therapist. A psychologist shared his client's experience from the TSY group: "In his psychological treatment Dan struggled with difficult feelings of anxiety and rage that attacked his possibility of a meaningful human connection and a sense of meaning in his life... Within a yoga therapy group, he found moments of calmness and peace, which he described as precious and rare in his life. The Yoga therapy have evolved new experiences of calmness, security, and hope, that he has not felt for so many years. Then we have started to look for these experiences together within his psyche, within his life".

A therapist shared that since her patient has started participating TSY group, he started to show up more continuously to his individual therapy, with less cancellations and less rage and emotional eruptions. This change was noticeable and last long.

Other findings include participant who reported being able to gradually reduce the dose of sleeping pills up to a point he did not use them at all. Another participant was gradually able to postpone taking his SOS medication by using yogic and somatic self-regulation tools. In addition, participants reported improvement of symptoms as chronic pain, orthopedic issues, and balance issues.

A psychiatrist in the clinic shared her experience from monitoring her clients who participated in the TSY group: "For me it's like medication. It provides a solid base for regulating and grounding...and a catalyst for treatment. It provides some sort of platform on which a more in-depth process of dealing with traumatic content can be done. This is what I see in practice".

### **5. Conclusions**

This preliminary work demonstrates that integrating short-term trauma-sensitive yoga (TSY) group in public psychiatric settings for veterans dealing with PTSD can be a platform for enhancing self-regulation and improving quality of life. It was also found as promoting illness management, treatment adherence and better engagement of veterans as clients in psychiatrists' public services. Hence, the model has shown its efficiency in both the micro and macro levels. It is a promising modality that enhances other therapeutic and rehabilitation efforts either as standalone treatment or as supplementary treatment within public services. Future studies should empirically examine the effectiveness of this clinical model with various measures and quantitative means. Another area for research is the applicability of this approach for other psychiatric fields (e.g., sexual trauma, anxiety, depression).

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