

## Disconnected; Treating Mind-Body Trauma in Survivors of Sexual Violence

<sup>1</sup>Estefanía A. Bonavera, M.A.; <sup>2</sup>Professor Krista A. Figueroa, M.A. C.S.P.C.

<sup>1</sup>Seton Hall University

<sup>2</sup>Caldwell University

**ABSTRACT:** The authors explore the impact of Post-Traumatic Stress Disorder (PTSD) in women who have suffered sexual violence. Incident rates are high, while treatment and support are scarce, often leaving women fearful of asking for help. When women do seek therapeutic assistance, the response is often inadequate. Trauma has an impact on the mind and body that can lead not only to mental health disorders but can also create biological conditions in which physical disease develops. The stress response, triggered by trauma and activated by the autonomic nervous system (ANS), creates a dissociation between the mind and body that affects victims in their everyday lives. The body remains hypervigilant to re-experiencing trauma and is sensitive to external and internal triggers. These factors combine to produce a climate where survivors feel unsafe in their own bodies and their environment, which is antithetical to recovery and reintegration. This research emphasizes the impact of sexual violence on the mind-body connection and describes practices that can strengthen post-trauma mind-body re-integration. Some practices discussed include grounding techniques rooted in mindfulness, safe spaces to heal mind-body dissociation, feeling comfortable in the environment where survivors heal, and intentional physical movement, which has been empirically proven as crucial to restoring the mind's connection to the physical body. The authors analyze how mind-body re-integration leads to improving victim self-awareness and enhancing positive feelings toward their bodies after experiencing the physical and emotional trauma of sexual assault. Emphasis is placed on the impact of trauma to the mind-body connection, as well as on somatic practices that can strengthen mind-body integration.

### I. INTRODUCTION

The World Health Organization (2020) defines sexual violence as any coercive act against an individual's sexuality. These acts include sexual abuse, forced prostitution, and neglect of girls. Although men also experience sexual violence, women suffer much higher rates and more severe injuries (Li et al., 2023). Survivors of sexual violence are more susceptible to traumatic symptoms as compared to other trauma cohorts (Pebole et al., 2020). A systematic review found that there is a global prevalence of one out of three women (29%) who will sustain sexual violence in their lifetime (Li et al., 2023). These rates do not account for the large proportion of unreported cases, which would make the incident rates even higher due to underreporting (Li et al., 2023).

Attention must be focused on the high prevalence of sexual violence around the globe. This issue is largely being neglected by health care systems (Li et al., 2023). Not only is there a shortage of trauma-trained professionals, but the economic cost for survivors of sexual violence presents a significant barrier to treatment access (Pebole et al., 2020; Li et al., 2023). Victim statistics are increasing, especially in underdeveloped countries, and research shows that the aggressor is usually a family friend, neighbor, or someone known to the victim. This reality often compounds the victim's lack of safety and makes them less likely to self-report the crime (Li et al., 2023). In addition, the economic debt after appropriate treatment and prosecution often burdens victims with a debt of about \$122,462 on average (Miles et al., 2023). Sexual violence exerts a heavy physical, emotional, and financial toll on victims.

Sexual violence is a traumatic experience that profoundly impacts women's psychological and physical health, as well as impairing their social life, and causing multifaceted trauma (Nixon, 2024). The origin of the word "trauma" comes from the Greeks and translates directly to the word "wound" (McBride, 2021). Victims navigate this "wounding" in various, disparate ways, but the symptoms of trauma manifest in certain analogous patterns. Among the most common trauma symptoms in sexual violence survivors are eating and body image disorders, emotion dysregulation, and chronic pain (Pebole et al., 2020). The impact affects victims not only physically, but mentally, and can include unhealthy coping strategies such as substance use and suicidal ideation (Miles et al., 2023).

### Post-Traumatic Stress Disorder and Sexual Violence

Sexual violence impacts women's health in ways that translate into their social lives and is associated with Post-Traumatic Stress Disorder (PTSD). In victims of sexual violence, PTSD often develops after exposure to traumatic or re-experiencing events (Nixon, 2024). Triggering events can happen directly to the individual, be witnessed, or be vicariously experienced through someone else. Vicarious or secondhand trauma can also lead to PTSD within the sexual violence victim population. PTSD symptoms include intrusive memories, nightmares, flashbacks, hypervigilance, overall psychological distress, avoidance of stimuli related to the trauma, and cognitive alterations (American Psychiatric Association, 2022).

Seventy-five percent of sexual violence survivors develop PTSD within one month of the event (Miles, 2023). Re-experiencing trauma means that an individual lives their life as if the trauma were happening in the present, with new experiences being shaped by what happened in the past (Bessel van der Kolk, 2014). Recent research suggests that trauma can influence gene expression and contribute to transgenerational trauma (McBride, 2021).

PTSD impacts both body and mind, and healing trauma means restoring the individual to safety while helping the brain to understand that it can stop reacting to a past threat (Bessel van der Kolk, 2014). The entire nervous system changes to maintain control, often leading to autoimmune diseases, and the most effective pathway to healing involves mind-body interventions (Bessel Van der Kolk).

McBride (2021) asserts that with intention and safety, PTSD activation in the body can slowly be unwound and the body can be returned to a state of rest. It is crucial to create safety in the present moment through mindfulness practice. By working with a trauma therapist and holistic healers, the nervous system can begin to experience relaxation, where the gentle presence of another does not feel like a threat (McBride, 2021).

### Trauma and Stress Response

Important differences between stress and trauma exist in the context of PTSD. Once an individual experiences a stressful event, the mind-body connection is activated and a perception of the connection between the cognitive and the physical develops. The traumatic experience is processed by integrating meaningful, subjective past experiences and genetics; certain events affect some people and not others.

Stress functions as a survival response, often serving as a motivator. The way a person perceives stress can determine how it affects them physiologically and psychologically, either positively or negatively. Studies have shown that when stress is framed as a helpful tool to protect the body, this approach can help in navigating challenging situations (McBride, 2021). Having insight into one's own stress staircase can help identify stressors and prepare a safety plan.

There are many models of stress activation, but the Staircase of Stress response is most applicable to explain how trauma impacts the mind and body of sexual violence survivors. Once an event becomes overwhelming, the individual experiences feelings of powerlessness or a loss of control, and perceives it as traumatic, the stress response is activated (McBride, 2021). The first level in the Staircase of Stress response paradigm is safety and involves a bodily sensation of feeling secure and at rest (McBride, 2021). When a stressor arises, social engagement and seeking support are the first steps to calming the body's stress response.

During this period, the vagus nerve is activated, and the individual seeks help, which involves processing the external assistive and supportive feedback that is provided (McBride, 2021). If there is no aid provided, the body detects a high threat. It responds to this peril by activating the hypothalamic-pituitary-adrenal axis, leading to the second step, mobilization. This causes a release of stress hormones and ensures that the body has the resources to fight or flee from danger (McBride, 2021).

The nervous system can activate as a fight-flight-freeze response, based on past experience and what our brain has learned. If the nervous system cannot differentiate between options, it can lead to overwhelm and tends to shut down, leading to the freeze response. This is usually when dissociation occurs, wherein the mind disconnects entirely from the physical body and present-moment experience. Under these conditions, the mind withdraws through depersonalization and derealization and the body disengages by fainting, curling up, or immobilization (McBride, 2021).

The above steps are not linear; certain individuals may skip certain steps (McBride, 2021). The experience progression will depend on the specific neural pathways and behavioral patterns of each person. Safety may not be available for some, leading to intense trauma, wherein poor social engagement and external judgment or criticism further the cycle of stress and emotional pain (McBride, 2021). These factors can make an individual feel trapped by their trauma. If they do not receive the supportive care needed, it can lead to pathological negative belief states centering on victim-blame, shame, and guilt. Breathwork and titration (exposure to traumatic events in small portions) are essential to gradually teaching the nervous system that it is safe in the here and now (McBride, 2021).

The psychological pain of sexual violence is often carried in the physical body and can result in physical illnesses related to unresolved trauma. When there is no safety step to return to, the body confuses

danger and security, creating deep feelings of instability and disconnection between mind and body. Anything related to the trauma is stored in the brain as the same “package,” where the place, what the senses perceive, and the people involved, become neurologically unsafe. The mind-body link between these elements activates the stress response when a triggering stimulus is presented (McBride, 2021).

## II. TRAUMA AND THE AUTONOMIC NERVOUS SYSTEM

The Staircase of Stress response is essential to connecting how trauma affects the physical body, manifesting in the nervous system. The bodies of trauma survivors demonstrate an altered ability to process sensory information, meaning that their capacity to organize and integrate information is modified (Kearney & Lanius, 2022). This leads to an overwhelming and exaggerated response to external stimuli, which includes emotion dysregulation, impulsivity, time blindness or distortion, and social isolation (Kearney & Lanius, 2022). Survivors are in a constant state of overwhelm, even when there is a lack of threat, due to sensory hyperresponsivity. This heightened state of arousal is essential in detecting external threats, but misfires and overreacts in sexual violence survivors (Kearney & Lanius, 2022).

The autonomic nervous system (ANS) is responsible for hypervigilance and has two branches: the sympathetic and parasympathetic nervous systems (Bessel Van der Kolk, 2014). The sympathetic nervous system is responsible for arousal, stress activation, and the fight-flight-freeze response. The parasympathetic nervous system promotes regulation and relaxation. Breathing engages both the sympathetic and parasympathetic systems; inhaling activates the sympathetic system by preparing the body for stimuli, and exhaling triggers the parasympathetic system. This is why yoga, meditation, and breathwork help to regulate and calm the nervous system and promote mind-body integration.

The amygdala operates as the brain’s fear processing center, automatically scanning external stimuli for threat detection (Bessel Van der Kolk, 2014). This is achieved with support from the hippocampus, which processes the stimuli in relation to past experiences. Sensory input is first received by the thalamus and later transferred to the amygdala for emotional processing (Bessel Van der Kolk, 2014). The amygdala makes decisions before the frontal lobes can make an objective judgment. When this assessment function is not working properly, it triggers a fight-flight-freeze response. If the amygdala senses danger, it communicates with the hypothalamus, which releases stress hormones (including cortisol and adrenaline) and activates the autonomic nervous system to respond to the threat in the environment (Bessel Van der Kolk, 2014).

Heart rates, respiratory rates, and blood pressure become elevated, which prepares the body for fight-flight-freeze. Under normal conditions, once the threat diminishes, the body returns to its normal state. In individuals who suffer from hypervigilance, if there is no recovery, the body remains constantly triggered because of the way a victim’s nervous system changes after experiencing intense trauma. Thus, the brain will act as if the trauma were still happening, secreting stress hormones and creating a reality where every situation is influenced by the past traumatic experience. In individuals with PTSD, the amygdala cannot accurately interpret a situation as either treacherous or innocuous. This leads to emotional dysregulation, an overreactive startle response, social withdrawal, and freezing at someone else’s touch.

When a person who has experienced trauma is in the presence of certain sounds, places, people, smells, etc. that they associate with the foundational trauma, the amygdala reactivates fight-flight-freeze and triggers the stress response (McBride, 2021). The brain cannot differentiate between the present moment and the past trauma, and responds as though the trauma is happening again. Healing relies on learning how to interpret triggers and dedicating time to tend to them (McBride, 2021).

For victims, the path of healing can become re-traumatizing in a world that prioritizes productivity and leaves little space and resources for victims to heal mind-body dissociation (McBride, 2021). Social judgment impedes victims from feeling safe in their own bodies, leading to shame and guilt that results in depression and an exacerbated withdrawal response. Thus, the social places that should bring victims back to safety represent danger, making it even more difficult to process what safety means post-trauma (McBride, 2021). Since victims struggle to regain autonomy over their mind and body, this lack of safety can strongly affect them both mentally and physically, sometimes leading to the expression of autoimmune diseases. Healing the mind-body connection means bringing the person back to a state of present moment safety and arming them with strategies to manage triggers that lead to re-experiencing events (Bessel Van der Kolk, 2014).

## III. MIND-BODY APPROACHES TO HEALING TRAUMA

Research has demonstrated that trauma is stored in the body, causing individuals to remain hypervigilant long after the initial trauma event has passed (Nixon, 2024). The feelings of shame and guilt that survivors of sexual violence experience trigger intense emotions and problems with self-esteem regulation. Mind-body practices can provide a pathway for women to feel safer and more grounded in their bodies. Research in this area is limited, but a systematic review of qualitative studies on the matter found that yoga, dance, and physical exercise, following trauma-informed approaches significantly improved trauma symptoms (Nixon, 2021).

Participants in the qualitative studies deepened their mind-body connection and developed improved relationships with their bodies. This enhanced the participants' ability to self-soothe through mind-body resources such as breathwork, mindfulness, touch, and other grounding techniques. Moreover, it gave sexual violence survivors a sense of control and safety over their inner experiences and resulted in a decrease in dissociative incidents and distress-inducing flashbacks. This newfound safety perspective enabled sexual violence victims to process their intransigent traumas and embark on a journey to healing.

### **Movement Therapy and Restoring Safety Within the Body**

The trauma of sexual violence can lead victims to perceive the physical body as unsafe and shameful. The body itself comes to serve as an ever-present reminder of the trauma and becomes a perpetual trigger. The body becomes an unsafe place that reminds the victim of the traumatic occurrence. Since sexual assault is violence against the body, interventions that target both the psychic and physical trauma are essential to reintegrate the mind-body connection (Nixon, 2024).

Victims reported that movement therapy practices helped them remain present in their own bodies and resulted in regained control of complex emotional states (Nixon, 2024). Since difficult emotions and trauma are stored in the body, therapeutic movement can help to process and release unresolved negative feeling states. Certain body movements, such as those practiced in dance therapy, encourage self-compassion and self-acceptance. Engaging in physical activities through a trauma-informed approach creates a safe environment in which victims of sexual violence can practice acceptance of their physical form.

In addition, being in the presence of other victims participating in the same physical activities enhances opportunities for social connection and healing within a community. This type of shared social context can aid victims in restoring trust after their bodies are violated. Therapeutic movement promotes boundary establishment and provides pathways for rehabilitating trust with physical touch. Victims reported not being threatened, freezing, or emotionally shutting down when another person touched them during therapeutic physical movement exercises (Nixon, 2024). This also extended to relationships outside of these activities, making victims feel more grounded within their own bodies.

Through physical movement therapy, victims report an increased willingness to open themselves, both physically and emotionally, to physical intimacy. Movement therapy also strengthened victims' desire to create safe bonds and connections with others. Victims reported a renewed sense of hope, increased feelings of empowerment, and expressed optimism about the future after practicing therapeutic movement (Nixon, 2024). Apart from having a beneficial impact on their physical bodies, movement therapy also promoted feelings of overall psychological well-being. Victims reported lower levels of anxiety and depression (Nixon, 2024).

Therapeutic body movements helped victims to process emotional experiences, releasing painful holdings and creating a sense of wholeness. Furthermore, the studies revealed an overall sense of acceptance of victims' bodies, recognizing their strength and beauty, both outside and within. This increased self-compassion created a sense of worthiness and began to foster a healthy relationship between victims and their bodies. Therapeutic approaches that include therapeutic body movement often enable survivors to have a broader ability to process their emotions. It is important to note that therapeutic body movements can be especially triggering for victims of sexual violence. Many participants explained the need for trauma-informed approaches to help manage triggers in order to provide a healing sensory experience in reclaiming their bodies as a safe space after trauma.

Incorporating a safe environment and a non-hierarchical relationship with the practitioner helped to achieve an appropriate level of comfort. The relationships and collaborations among participants also created a compassionate and accepting experience. Additionally, therapeutic body movement fostered authentic connections and modeled safe relationships. Victims reported having a greater spiritual connection with mind-body practices, which provided them with a profound feeling of inner peace and internal awareness, resulting in a positive connection to the outside world (Nixon, 2021).

It has been shown that having conversations with one's physical body and being deeply in touch with it through therapeutic movement can enhance the mind-body connection (McBride, 2021). Behaviors such as placing both hands over the chest and whispering the phrase "you are safe" can help strengthen the mind-body connection (McBride, 2021). Mindfulness grounding techniques can also serve as a powerful coping technique for those suffering from trauma (McBride, 2021).

Intentional sensory stimulation, such as engaging the five senses and incorporating therapeutic body movements, such as standing barefoot on the earth or splashing cold water on the face, can provide a grounding effect for those suffering from re-experienced trauma. Holistic approaches that target mind-body integration and the person as a whole are crucial for treating the trauma that results from sexual violence (Nixon, 2024).

### **Physical Exercise, Trauma, and Post-Traumatic Stress Disorder**

Physical exercise has ameliorating effects on trauma and PTSD symptoms, such as a decrease in symptom intensity and psychological distress, which promotes overall desensitization. Research explored the relationship between exercise, trauma, and PTSD symptoms. It was discovered that trauma and PTSD symptoms were significantly reduced when the sufferer was physically active (SantaBarbara et al., 2025).

Activities that promote empowerment over the body, such as physical exercise and yoga, help sexual violence survivors regain a sense of control and autonomy over their physical being. There are no exhaustive studies on the relationship between physical exercise and improved trauma symptoms, and often the research is underrepresented for the female cohort (Pebble et al., 2020). Studies have shown wide-ranging benefits for sexual violence survivors who practice yoga and partake in cardiovascular exercise (i.e., walking). Future research is needed to develop more inclusive and all-encompassing literature (Pebble et al., 2020).

### Trauma-Informed Care

Trauma-informed care (TIC) develops and implements interventions that consider the impact of trauma and its symptoms while helping clients to resist traumatization (Pebble et al., 2020). TIC is rooted in safety, peer support, trust, and empowerment, and focuses on educating providers to lead with empathy and provide crucial psychoeducation to client-victims. These professionals avoid hands-on guidance and are familiar with various health conditions that relate to PTSD. TIC practitioners are trained to recognize signs of abuse and accompany individuals in the healing process, including preparation to intervene, seeking mental health assistance, and connecting client-victims with legal resources. These actions are pursued while respecting the victim's independence and unique healing time frame (Pebble et al., 2020).

### Limitations

Multiple holistic approaches can help in promoting the reintegration of mind and body to heal from trauma. Unfortunately, there is not enough research on how these mind-body approaches can assist women in overcoming sexual violence trauma. One of the most significant limiting factors in the current research revolves around sample populations, which predominantly include only men or white women. Sexual violence is a widespread and pervasive problem; a multicultural approach is necessary in forging awareness of best practices.

Although most women who are victims of sexual violence show a readiness to engage in holistic mind-body practices, these therapeutic techniques can be re-traumatizing for some individuals. Discourse on somatic practices for women with severe traumatic distress has yet to be explored (Nixon, 2024). Based on the available research, the authors submit that treatment in the field should be planned holistically and subjectively for each individual and based on symptom presentation. Promoting trauma-informed training and scope can help the current system produce better outcomes for victims.

## IV. CONCLUSION

Preventing sexual violence is a human rights issue that, despite its high prevalence, remains largely under-researched. Women are disproportionately affected by sexual violence, both psychologically and physically, and unresolved trauma impedes survivors' ability to recover not just on a psychological level, but also on a biological level. Trauma remains stored in the body, where triggers redirect the brain's attention to persistent threat recognition. When a trigger is presented, the brain and body respond as though the trauma is happening again in real time. This is why holistic approaches are effective at reintegrating the disconnection of mind and body that result from sexual trauma.

By directing focus to treating one's physical body with patience and acceptance, victims can interrupt the re-experiencing cycle and recognize present-moment safety. This perspective and control can help survivors feel grounded and live their lives with purpose after experiencing sexual trauma. The lack of data on this matter greatly disadvantages less privileged victims, fails to meet victims in unsafe places, and further contributes to the failure of healthcare systems in addressing the complex needs of sexual violence victims. The scarcity of research on trauma-informed mind-body interventions and information on women with PTSD compounds the problem. This lack of access perpetuates cycles of violence, protects perpetrators, and leaves victims alone and unheard.

## REFERENCES

- [1] Bessel van der Kolk, B. A. (2014). *The body keeps the score: Brain, mind, and body in the healing of trauma*. Penguin Books.
- [2] Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, Text Revision American Psychiatric Association. (2022). *Diagnostic and statistical manual of mental disorders* (5th ed., text rev.; DSM-5-TR). American Psychiatric Association Publishing.
- [3] Kearney, B. E., & Lanius, R. A. (2022). The brain-body disconnect: A somatic sensory basis for trauma-related disorders. *Frontiers in Neuroscience*, 16. <https://doi.org/10.3389/fnins.2022.1015749>

- [4] Li, L., Shen, X., Zeng, G., Huang, H., Chen, Z., Yang, J., Wang, X., Jiang, M., Yang, S., Zhang, Q., & Li, H. (2023). Sexual violence against women remains problematic and highly prevalent around the world. *BMC Women's Health*, 23(1). <https://doi.org/10.1186/s12905-023-02338-8>
- [5] McBride, H. L. (2021). *The wisdom of your body: Finding healing, wholeness, and connection through embodied living*. Brazos Press, a division of Baker Publishing Group.
- [6] Miles, L. W., Valentine, J. L., Mabey, L. J., Hopkins, E. S., Stodtmeister, P. J., Rockwood, R. B., & Moxley, A. N. (2023). A systematic review of evidence-based treatments for adolescent and adult sexual assault victims. *Journal of the American Psychiatric Nurses Association*, 30(3), 480–502. <https://doi.org/10.1177/10783903231216138>
- [7] Nixon, M. A. (2024). Exploring women's experiences of healing from sexual trauma through engagement in mind–body practices: A systematic review. *Counselling and Psychotherapy Research*, 24(3), 884–896. <https://doi.org/10.1002/capr.12747>
- [8] Pebole, M., Gobin, R. L., & Hall, K. S. (2020). Trauma-informed exercise for women survivors of sexual violence. *Translational Behavioral Medicine*, 11(2), 686–691. <https://doi.org/10.1093/tbm/ibaa043>
- [9] SantaBarbara, N. J., Checko, E. R., Pebole, M. M., & Whitworth, J. W. (2025). Cross-sectional exercise-related differences in PTSD symptoms, psychological distress, physical pain, and sleep quality in trauma-exposed adults. *Frontiers in Psychology*, 16. <https://doi.org/10.3389/fpsyg.2025.1445144>
- [10] World Health Organization. (2020). *Violence info – sexual violence – sexual violence*. World Health Organization. <https://apps.who.int/violence-info/sexual-violence/>