

Why Adverse Childhood Experiences Matter

By Matt Erb and Kristine Weber

Emily, a mid-30s White female, came to yoga therapy because she wanted to address her fibromyalgia and weight gain. She reported that her weight gain began when she quit smoking a few years earlier. Lack of energy and widespread pain made it difficult to exercise. She also reported that she was eating late at night, especially when she was feeling stressed from work.

An assessment revealed that Emily's childhood was rocky. Her father drank heavily, became violent, and hit her mother. Her parents divorced when she was 4, and her father moved to a different city. Her mother worked overtime and sent Emily to a neighbor's after school. The neighbor was another busy single mom who spent little time with her. Meanwhile, Emily's father hit a pedestrian when he was driving drunk and was sentenced to 3 years in prison. All of these events can be classified as adverse childhood experiences (ACEs).

ACEs may affect a client's case, and research has linked them to chronic health conditions. Yoga therapy has much to offer in such situations. In addition to the nervous system-soothing practices that can support a client like Emily, the unique perspective of yoga philosophy, which offers a wider lens on ontology, etiology, and epigenetics, may provide deeper possibilities for healing from the pernicious effects of trauma.

What Are ACEs?

ACEs are potentially traumatic events that may have negative, lasting effects on health and well-being.¹ A significant and growing body of research has linked ACEs to health challenges across one's lifespan.

In the 1980s, Dr. Vincent Felitti observed correlations between ACEs and subsequent chronic conditions among his patients in an obesity clinic. He launched a large public health study to better understand these correlations.

The Adverse Childhood Experiences (ACE) Study followed more than 17,000 individuals. Participants were asked if they had experienced any of the following stressors before age 18: abuse (physical, sexual, or emotional); neglect (physical or emotional); or household challenges (domestic violence, substance misuse, household mental illness, parental separation/divorce, or incarcerated household member). For each question answered yes, one point was assigned, and the score was compared to the participant's health record. The resulting ACE score was strongly correlated to the development and prevalence of a wide range of health issues. Over two-thirds of respondents had at least one ACE, and 40% had two or more—this from a study with participants who were mostly college-educated, employed, and with access to quality healthcare.

The original research has been supported by dozens of follow-up studies demonstrating a dose-response pattern—the higher the score, the greater the likelihood of experiencing complex health issues, such as heart disease, cancer, and depression, across one's lifespan. Risky health behaviors such as inactivity, substance misuse, violence, overeating, and smoking are also strongly associated with higher ACE scores.¹⁻⁴ An ACE score of 4 is associated with a 400%

increase in the risk of developing lung disease and a 1,220% increased risk of suicide.¹ With a score of 6 or more, the risk of drug misuse increases 373% and suicide increases by 2,436%, after adjusting for socioeconomic factors.⁴

Emily's history revealed five ACEs that may have contributed to her health challenges.

Yogic Perspective

The mind wants to know why. But often clients present with chronic health challenges that defy explanation and treatment options beyond symptom management. In general, it's risky to blame any dysfunction within a client's body, mind, and environment (BME) on one event or experience. But yoga therapy offers a deeper, less linear perspective on suffering and the experience of being human. A yoga therapy perspective may involve regarding interacting levels of being (*koshas*) that includes a spiritual perspective for understanding the possible metaphysical and energetic contributors that lie beyond reductive biomedical explanations.

Posttraumatic growth is not a process that can be imposed by a clinician, but it can be supported and validated if it emerges through the client's inner work.

From the Vedic texts, the *sarira* (three bodies) model suggests that the physical body is the epiphenomenon of the subtle and causal bodies. Following this ontological flow, we can start to understand suffering as rooted in realities that may run deeper than a biomedical model can explain. The Yoga Sutra concepts of *samskara* (mental impressions and psychological imprints) and *vasana* (behavioral tendencies that affect our actions) may be useful here. *Samskaras* arise as patterns that may help one cope but are often maladaptive. *Vasanas* are deeper. They live in the subtle body, and according to yogic philosophy may be carried from lifetime to lifetime.

For some clients, understanding trauma as arising from past experiences, or even through lineages (generational trauma), may help them reframe and move forward. The idea that the *samskara* can be “burned away” and free them from a particular bondage may be a way for some to work through childhood experiences and actualize their potential.

Although Emily's impetus for seeking yoga therapy was weight loss, if her yoga therapist chose to focus solely on providing a fat-burning asana routine or weight-loss program without addressing the links to her ACEs, she may have missed the larger context and the possibility for deeper healing. Of course these conversations must be handled with the utmost respect and care by the yoga therapist. The idea that there could be a karmic connection between trauma and past experiences is fraught with the very un-therapeutic potential for stirring up shame or blame in a client.

The phrase “look back, but don't stare” can offer guidance. It's useful to have a big-picture perspective on all the factors that may be contributing to Emily's health challenges, but more important than trying to unravel the content of her trauma is helping her improve

the relationships within her BME experience. Emily's work with her yoga therapist helped her connect the dots and provided insight and validation into her search to understand herself and improve her coping strategies. People who recover from trauma are those who make meaning out of it—not by staring at the past, but by acknowledging it and then moving forward with a deeper sense of purpose and meaning.

Wide-Ranging Effects

Physical, Mental, and Emotional Health

Follow-up studies have broadened the definitions of ACEs to include many wide-ranging life events that are experienced as distressing. A few examples include the death of a family member, bullying, or racism.

While there are scientific gaps in fully elucidating the mechanisms that inform the link between ACEs and health across the lifespan, the associations point to maladaptive physiological and biobehavioral mechanisms, including adopting coping strategies such as substance abuse, eating disorders, inactivity, and promiscuity.

Emily did not report links between her childhood experiences and her subsequent smoking, overeating, and then fibromyalgia, but when her yoga therapist offered that according to research her coping behaviors could be associated with her stressful childhood, a lightbulb went on. Although she had never made the connection before, it made sense to her: Smoking and overeating were ways she coped with the distressful feelings that she regularly experienced.

For kids, a little stress—such as a skinned elbow on the playground—is normal. However, intense, protracted childhood stress can negatively impact the development and function of the central and autonomic nervous systems, which affects allostatic load, inflammatory and immune processes, gene expression (epigenetics), and the capacity to self-regulate.^{5,6} Within these substrates lies the increased risk for developing health issues, which may include attempts to self-soothe through substance use, addictive behaviors, and other dysfunctional coping strategies. Relational support and resilience-building efforts may buffer against these negative effects.

When we consider Emily's significant ACEs, she demonstrates remarkable character and resilience—she has a steady job, friends, and puts effort into taking care of herself—despite the history that puts her at risk for mental and physical health challenges. Emily's yoga therapist helped her build upon her resilience to find more adaptive coping strategies.

ACEs and Trauma

Trauma-informed yoga is a hot topic. But it's important to understand that the presence of ACEs may or may not lead to a PTSD or complex-trauma diagnosis. This does not mean that traumatic experiences escaped translation into biology, but it does suggest that ACEs may not show up as a mental health diagnosis, rather, they may remain hidden determinants of numerous health conditions and behavioral patterns. There is a growing movement to recognize traumatic impact outside the current DSM-5 criteria for PTSD. Trauma education (and trauma-informed care in general) is part of a larger transdisciplinary process of acknowledging the ubiquity of trauma in our shared human experience.

Yoga therapists can, however, risk overemphasizing trauma when it may not be relevant to the client's case. If Emily had been a little older and had come to yoga therapy with a chief complaint of weight gain after menopause but did not report an autoimmune diagnosis or a rocky childhood, her yoga therapist would have perhaps wanted to move in the direction of helping her balance her hormones, increase exercise, and embrace the new paradigm her body was entering rather than assume her weight gain was directly related to childhood trauma. Because trauma is so widespread, it can be easy to slip into the perspective that every complaint emanates from trauma, so it's important to do a thorough assessment and acknowledge the complexity of factors and interactions. Regularly tempering assumptions is an important skill for yoga therapists to develop.

I said: What about my eyes?
He said: Keep them on the road.

I said: What about my passion?
He said: Keep it burning.

I said: What about my heart?
He said: Tell me what you hold inside it?

I said: Pain and sorrow.
He said: Stay with it. The wound is the place where the Light enters you.

—13th century Persian poet Mevlâna Jalâluddîn Rumi

Reclaiming and Thriving

In looking at the substrates of human suffering, yoga therapy is in a unique position to assist clients in navigating the experience of trauma and the possibility for posttraumatic growth. Posttraumatic growth is the process that can occur when the experience is alchemized into a deeper sense of meaning, purpose, and identity. This is not a process that can be imposed by a clinician, but it can be supported and validated if it emerges through the client's inner work.

As Emily began to heal, the possibility of considering her ACEs as teachers and motivators allowed her to begin to see through the lens of “what can I learn from this” instead of “why did this happen to me?” With guidance, support, and persistence, Emily gradually was able to understand that her pain and suffering connected her to all living beings. It increased her sense of empathy. Reappraisal became possible, and her relationship to her experiences was transformed.

Yoga Therapy Assessment

For the yoga therapist, approaching each client with the awareness that ACEs may be present and influencing their BME manifestations is an important starting point. An ACE assessment can serve as a tool for understanding more of the complexity informing the client's current health. Additionally, an analysis of ACE data demonstrated that just asking the questions in a biopsychosocial interview—without any additional referrals such as psychotherapy—led to a reduction in subsequent doctor's office visits by 35% in a sample of 130,000 patients.⁷

We recommend using a yoga therapy assessment that includes an ACE line of questioning as part of gathering a comprehensive life history. We also recommend that yoga therapists offer their clients brief functional psychoeducation about ACEs, because the questions can sometimes be difficult and provocative. Including ACEs in the assessment can also help yoga therapists recognize whether the case is within their scope of practice and/or what referrals might be appropriate for particular clients.

Comments like: “Every moment of our lives, from in utero to the present, influences how our bodies and minds are working in the now” may be helpful. Another may be “Childhood experiences are not ‘outgrown,’ they are ‘built in’—in other words, due to toxic stress, traumatic life experiences are translated into our biology.” If ACEs were mainly psychological but the presenting challenge is largely somatic, it may be even harder for a client to understand the connection. This underscores the need for adopting a skillful, non-threatening approach to exploring ACE questions and educating clients about ACEs.

Skillful ACE integration also helps diminish the pervasive stigma around mental health within the whole health picture, normalizes somatic symptoms, and opens the door to integrative treatment options. However, in some cases, ACE assessment may unveil overwhelming content, signaling the need for collaborative referrals to licensed behavioral health providers.

Yoga Therapy Application

Regardless of the number of ACEs revealed or the extent the client links past experiences to present symptoms, yoga therapy points the way to facilitating personalized practices focused on building resilience. This may include self-regulation skills, safe exploration of the breath, interoceptive awareness—building asana practices, exploring the relevance of the *yamas* and *niyamas*, and appropriate *mudras*, meditations, and mantra practices. Understanding yoga therapy and philosophy in relationship to contemporary neuroscience, self-regulation, and resilience may provide additional insight in this regard.⁸

It is important to realize that clients presenting with ACEs and/or various forms of trauma conditions may not be able to tolerate high doses of slow or exclusively interoception-focused practices. There are numerous training programs available to help yoga therapists understand the role of ethics, asana, pranayama, and meditation in context to trauma.

Population Health

Because ACEs are common and linked to chronic health conditions, and because yoga therapy offers powerful strategies for soothing and improving the function of the nervous system, it makes sense to think about the role of yoga therapy in the treatment of trauma from a population health perspective.

According to a 2014 report from the Agency for Healthcare Research and Quality, 86% of healthcare dollars in the United States are spent on chronic diseases. Felitti’s research has identified strong correlations between chronic disease and ACEs, therefore, a population health strategy should necessarily include empowering, person-centered, low-risk, low-cost, self-management skill-building practices like yoga therapy to help clinical and geographic populations

improve the function of their nervous systems and better manage the stress response.

ACEs reflect a shared reality that is best met with gentleness and compassion. Acknowledging ACEs gives you a broader and more in-depth awareness of your clients. Safely exploring the context of ACEs in yoga therapy contributes equally to client transformation and public health initiatives.

Emily’s work with her yoga therapist enhanced the care she received from her physician and her psychotherapist. This integrated strategy helped her find healthier coping strategies, reduced her fibromyalgia flareups, and provided greater freedom and ease in her body and in her life in general.

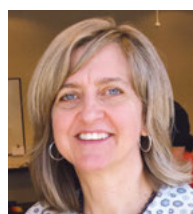
Yoga therapy, as creative potential, co-creates the space in which transformation of the roots of ACEs, trauma, and suffering may manifest. **YTT**

References

1. Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., . . . Marks, J. S. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The Adverse Childhood Experiences (ACE) Study. *American Journal of Preventive Medicine*, 14(4), 245–258.
2. Anda, R. F., Felitti, V. J., Bremner, J. D., Walker, J. D., Whitfield, C., Perry, B. D., Dube, S. R., & Giles, W. H. (2005). The enduring effects of abuse and related adverse experiences in childhood: A convergence of evidence from neurobiology and epidemiology. *European Archives of Psychiatry and Clinical Neuroscience*, 256(3), 174–186. doi: 10.1007/s00406-005-0624-4
3. Scott, K. M., Von Korff, M., Angermeyer, M. C., Benjet, C., Bruffaerts, R., Girolamo, . . . Kessler, R. C. (2011). Association of childhood adversities and early-onset mental disorders with adult-onset chronic physical conditions. *Archives of General Psychiatry*, 68(8), 838–844. doi: 10.1001/archgenpsychiatry.2011.77
4. Merrick, M. T., Ports, K. A., Ford, D. C., Afifi, T. O., Gershoff, E. T., & Grogan-Kaylor, A. (2017). Unpacking the impact of adverse childhood experiences on adult mental health. *Child Abuse & Neglect*, 69, 10–19. doi: 10.1016/j.chiabu.2017.03.016
5. Danese, A., & McEwen, B. S. (2012). Adverse childhood experiences, allostasis, allostatic load, and age-related disease. *Physiology and Behavior*, 106(1), 29–30. doi: 10.1016/j.physbeh.2011.08.019
6. Danese, A., & J Lewis, S. (2017). Psychoneuroimmunology of early-life stress: The hidden wounds of childhood trauma? *Neuropsychopharmacology*, 42(1), 99–114. <http://doi.org/10.1038/npp.2016.198>
7. Felitti, V. M. (2017). Future applications of the adverse childhood experiences research. *Journal of Child & Adolescent Trauma*, 10(3), 205–206.
8. Sullivan, M. B., Erb, M., Schmalzl, L., Moonaz, S., Noggle Taylor, J., & Porges, S. (2018). Yoga therapy and polyvagal theory: The convergence of traditional wisdom and contemporary neuroscience for self-regulation and resilience. *Frontiers in Human Neuroscience*, 12, 67. doi: 10.3389/fnhum.2018.00067



Matt Erb is an integrative physical therapist who specializes in chronic pain, headache, and mental health integration in rehab. He is on faculty with the Center for Mind-Body Medicine and owner of Embody Your Mind. He embodies a deep appreciation of yoga and a passion for learning and teaching.



Kristine Weber, MA, C-IAYT, E-RYT 500, has been studying yoga and holistic healing for nearly 30 years, teaching since 1995, and training yoga teachers since 2003. She is the director of the Subtle Yoga Teacher Training for Behavioral Health Professionals program at Mountain Area Health Education Center in Asheville, N.C. (www.subtleyoga.com)