2021 INTEGRATIVE TRAUMA THERAPY PILOT FINDINGS & IMPLICATIONS REPORT

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TABLE OF CONTENTS

Introduction

More than 50% of Americans suffer from a chronic health disorder[1]. Rates of anxiety, depression, post-traumatic stress disorder (PTSD), and addiction are skyrocketing. The roots of these issues and more can often be traced to trauma, Adverse Childhood Experiences (ACEs), and chronic stress.

The World Health Organization found that ACEs cost North America and Europe $1.3 trillion ($748 billion in North America alone) in lost productivity each year.[2] With two in three Americans experiencing at least one ACE, the impacts reach every corner of our society. Combining population attributable risk (PAR) and Center for Disease Control and Prevention (CDC) data shows that in 2017 nearly 650,000 people died in the United States due to ACEs. Two of the highest ACE PAR categories are opioid overdose and suicide, with 78% and 67%, respectively, related to ACEs.[3] In a 12-month period between 2020 and 2021, more than 100,000 people died of an overdose in the United States alone.[4] Youth suicides and hospital admissions for mental health crises have risen so drastically that toward the end of 2021, the American Academy of Pediatrics, American Academy of Child and Adolescent Psychiatry, and Children's Hospital Association declared a national state of emergency in children's mental health.[5]

In response, the field of trauma treatment has been rapidly growing and iterating, with dozens of established and new treatment modalities and clinical training programs (with highly variable degrees of evidence base) emerging to support the healing of individuals struggling with chronic symptoms resulting from unresolved trauma. Additionally, the development of these modalities has been informed by groundbreaking research in neuroscience, which is fundamentally changing our understanding of how trauma, adverse childhood experiences, and chronic stress impacts individuals psychologically, physiologically, emotionally, and socially.[6] [7] [8] [9]

Because of the complex nature of trauma healing and the fragmented landscape of clinical modalities, it is often necessary to integrate, sequence, pace, and individualize multiple methodologies for treatment to be effective. While many of the modalities have proven effective at addressing certain components of trauma and symptoms of nervous system dysregulation, there is a need for a holistic, multi-disciplinary approach to treatment where both quantitative and qualitative outcomes can be studied to validate efficacy.

In addition to the fragmentation of the field, the majority of trauma treatment modalities are, for the most part, only being delivered by a small number of clinicians in private practice that have had the resources to become trained in these cutting-edge approaches.[10] Presently, low-income and under-resourced individuals struggle to find access to treatment.[11]

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[1] Boersma, P., Black, L.I., & Ward, B.W. (2020) "Prevalence of Multiple Chronic Conditions Among US Adults", *Prev Chronic Dis*, 17, DOI: http://dx.doi.org/10.5888/pcd17.200130

[2] Bellis, M.A. et al. (2019) "Life course health consequences and associated annual costs of adverse childhood experiences across Europe and North America: a systematic review and meta-analysis", 4(10), DOI:https://doi.org/10.1016/S2468-2667(19)30145-8

[3] Campaign for Trauma-Informed Policy & Practice

[4] CDC (2021) *Drug Overdose Deaths in the U.S. Top 100,000 Annually*

[5] American Academy of Pediatrics (2021) *Declaration of a National Emergency in Child and Adolescent Mental Health*

[6] van der Kolk, B. (2015) *The Body Keeps the Score: Brain, mind, and body in the Healing of Trauma*, Penguin Books

[7] Porges, S. W. & Dana, D., Eds. (2018) *Clinical Applications of the Polyvagal Theory: The Emergence of Polyvagal-Informed Therapies*

[8] Schore, A. N. (2019) *Right Brain Psychotherapy*, W. W. Norton & Company

[9] Siegel, D. J. (2010) *Mindsight: The New Science of Personal Transformation*, Bantam Books

[10] The Kinsey Institute (2020, March) *The Traumatic Stress Research Consortium Newsletter*

[11] Harris, N. B. (2021) *The Deepest Well: Healing the Long-Term Effects of Childhood Trauma and Adversity*, HarpersCollins Publishers

To address these issues and to better understand how to make effective trauma treatment more accessible, The Trauma Foundation launched a pilot initiative using an integrative approach to trauma treatment that connected best practice trauma clinicians with underserved populations lacking the resources to access appropriate support and treatment. This paper outlines the approach to this pilot including clinician identification, training, client recruitment, treatment, and outcome findings.

An Integrative Approach to Trauma

Through a comprehensive interview process with over 25 thought leaders from the field (including researchers, trauma modality founders, and clinicians cross-trained in multiple trauma healing modalities), a consensus emerged around the best practice common denominators for effective trauma treatment. From that consensus a framework was developed for an integrative approach to trauma therapy (ITT) designed around five categories of interventions that address patient's unresolved challenges related to trauma. These categories are listed below.

1. **Psychoeducation**: Orientation to the role of the nervous system in maintaining regulation, how trauma dysregulates the normal functioning of the nervous system, and how to return the nervous system to a more ideal level of function
2. **Embodiment/Somatic Mindfulness**: Mindful awareness of one's body (increased interoceptive capacity), increased grounding, and orientation to the sensations and messages the body is sending
3. **Nervous System Regulation**: Effective co-regulation with patient and learning self-regulation skills and resources to help restore the nervous system's optimal level of functioning
4. **Metabolizing/Integrating Implicit Sensations, Emotions, and Memories**: Developing the capacity for patient to effectively process past trauma
5. **Understanding/Working with Adaptive Survival Strategies**: Bringing into conscious awareness the ways our early life experiences shape and motivate our behaviors in our present situation, and seeking out and practicing more useful ways to engage with ourselves and other people in our current roles

The Integrative Trauma Therapy Pilot

In April 2021, the Trauma Foundation launched an IRB-approved feasibility pilot to learn whether an Integrative Trauma Therapy approach could be delivered effectively to help individuals heal past trauma and nervous system dysregulation. The treatment approach was aimed at improving the following outcomes:

- Decrease in PTSD symptom severity
- Decrease in depression severity
- Decrease in anxiety severity
- Decrease in physical symptoms
- Increase in health and well-being

Additionally, the Trauma Foundation set out to learn how the pacing, organization, and personalization of the ITT approach could lead to more successful outcomes for a diverse group of trauma patients. Specifically:

- How do we recruit a diverse cohort of patients with developmental trauma?
- What types of data can we collect about the treatment experience from patients and clinicians?
- Does this integrated approach improve the adherence and compliance of patients in long-term trauma therapy?
- What happens if we provide clinicians the necessary tools to pace, organize and personalize treatment to produce successful outcomes for patients?

Clinician Selection

We selected six clinicians with a private practice in the Seattle area who all self-identified as trauma therapists. Each clinician has been in practice over 10 years and has been cross trained in multiple trauma healing modalities. The average number of modalities the clinicians have been trained in is 8.6. The modalities used most often in the pilot were:

- Somatic Resilience and Regulation (Kathy Kain & Steve Terrell)
- Attachment Based Therapy
- Somatic Experiencing (Peter Levine)
- Organic Intelligence (Steve Hoskinson)
- Polyvagal-Informed Therapy (Stephen Porges & Deb Dana)
- Internal Family Systems (Dick Schwartz)
- Mindfulness Based Therapy

Participant Recruitment

The Trauma Foundation's mission is to increase access to high-quality trauma treatment for groups that have traditionally been underserved by the mental health care system in the United States. This includes individuals who identify as Black, Indigenous, and people of color. One of the goals of the feasibility pilot was to develop relationships with community-based organizations to engage traditionally underserved clients in treatment.

The Trauma Foundation partnered with Neighborcare Health, the largest provider of comprehensive health care services in the Seattle area for low-income and uninsured families and individuals who have difficulty accessing care. The behavioral health consultants and mental health therapists who work with Neighborcare Health's clients selected potential pilot participants they thought would benefit the most from trauma treatment. The mental health staff then spoke with each potential participant to educate them about the pilot. They were then directly connected to a Trauma Foundation staff person for an introductory onboarding call.

The second cohort of participants in the pilot were students in the Master of Arts in Counseling Psychology graduate program at Bastyr University. In response to surveys from the Kinsey Institute Traumatic Stress Research Consortium, many clinicians in their network of trauma therapists identified themselves as trauma survivors[12]. This was true for many of the individuals in the pilot's cohort of Bastyr graduate students. One of the goals of the feasibility pilot was to determine whether this cohort of future therapists could benefit from trauma treatment and what, if any, effect the experience might have on their development as therapists.

[12] The Kinsey Institute (2020, March) *The Traumatic Stress Research Consortium Newsletter*

The Bastyr graduate students were given information about the pilot in one of their counseling psychology classes. As with the Neighborcare Health participants, those students who were interested were then directly connected to a Trauma Foundation staff person for an introductory onboarding call. Participants in the pilot had to meet a set of inclusion guidelines, which are listed below:

- Over 30 years old
- Reports history of childhood trauma (physical, sexual, or emotional abuse/neglect)
- ACE score above 4 (if known)
- No abuse or neglect within the past 12 months
- No active substance use disorder within the past 12 months that should require treatment
- No ongoing physical, sexual, or emotional abuse by a domestic partner that should require treatment
- No active psychotic or manic disorder that requires acute treatment
- Ability to participate fully in regular therapy sessions (no cognitive, social, physical, or emotional issues that would interfere with weekly therapy)
- Expectation that patient would comply with regular therapy appointments and treatment

Study Methods

Pilot participants were able to view bios of each therapist and rank order their preference of therapist. All participants received their first or second choice of therapist. Once matched, participants communicated directly with their therapist regarding all matters related to the therapy treatment. Participants scheduled their own appointments directly with their therapists.

The pilot participants received at least six months of individual treatment involving weekly sessions of regular therapy, individualized to support their personal development of healing and resilience. The therapy treatment lasted for seven months, from April to October 2021. All participants remained fully engaged throughout the pilot period, completing between 20-24 sessions.

The pilot team collected both quantitative and qualitative data to measure the impact and efficacy of the intervention, with the aim of positively impacting the mental and behavioral health of the individuals served. Participants were asked to complete a questionnaire and five clinical rating scales at the beginning of their treatment. The participants completed the same five clinical rating scales at the mid-point of treatment (after approximately 12 therapy sessions), and again at the end of their treatment (after seven months). Each participant also completed a Zoom interview with a Trauma Foundation staff person that was transcribed.

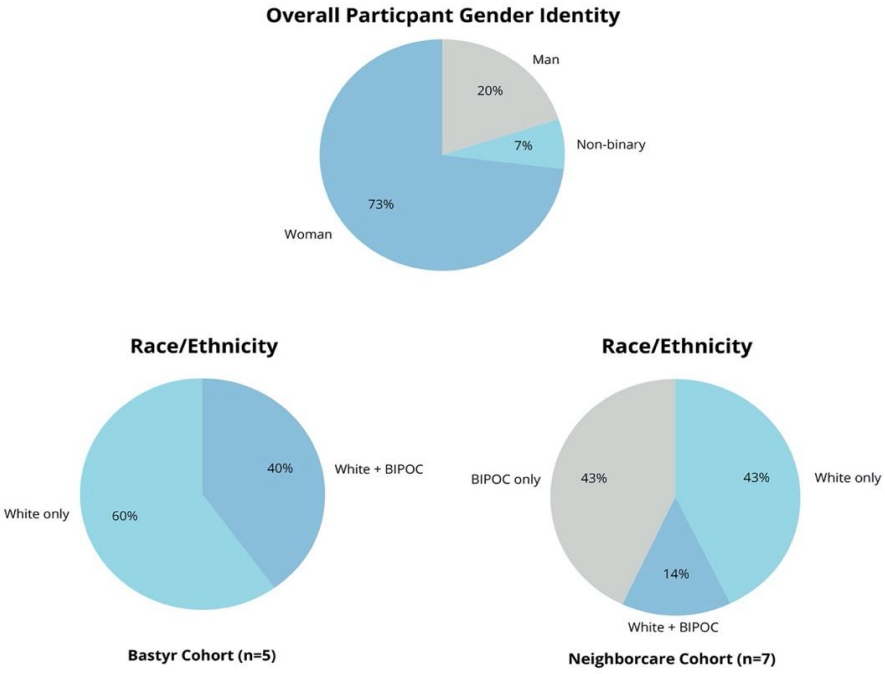
The clinicians completed a questionnaire at the beginning of the pilot and a brief survey after each therapy session. The clinicians also completed Zoom interviews with a Trauma Foundation staff person at the halfway point of treatment and after treatment was finished.

Data Collection and Analysis

The Trauma Foundation collaborated with LunaDNA, an online research platform that brings together individuals, communities and researchers. The LunaDNA platform provided a secure and anonymized way for The Trauma Foundation to collect health experiences and data directly from participants over the course of the pilot. The analysis of participant and clinician data was conducted by a team of data scientists from LunaDNA and Blue Lotus Consultants.

Participant Demographics

A total of 12 (N=12) participants completed the pilot with 100% participation for the seven-month duration. The 12 participants were further broken into two separate cohorts based on their referral agency: Neighborcare Health (n=7) and Bastyr University (n=5). Treatment was the same across both cohorts. Participant demographic data was also collected to capture an understanding of each participant and the cohort as a whole.



Overall Findings: A Mixed Methods Approach

As outlined above, data for the pilot was collected through both quantitative and qualitative approaches from both clinicians and participants.

Clinical Scales

Quantitative measures included several screening and diagnostic tools that are used in clinical practice and research to assess mental health and wellbeing. These tools include:

- **The Adverse Childhood Experiences (ACE) scale:** ACE scores are correlated with lifelong health outcomes and socioeconomic opportunity.
- **The Patient Health Questionnaire (PHQ-9):** Measures symptom severity for depression
- **The Generalized Anxiety Disorder scale (GAD-7):** Measures symptom severity for generalized anxiety
- **The Abbreviated PTSD Checklist - Civilian Version (PCL-C):** Assesses problems that correspond to key symptoms of PTSD
- **The Brief Resilience Scale (BRS):** Assesses the ability to bounce back or recover from stress
- **The Purpose in Life (PIL) scale:** Measures the presence of drive and meaning in life which are associated with psychological well-being

The pre- and post-pilot survey results demonstrated clinically significant improvements for participants in many measures of mental health and well-being.

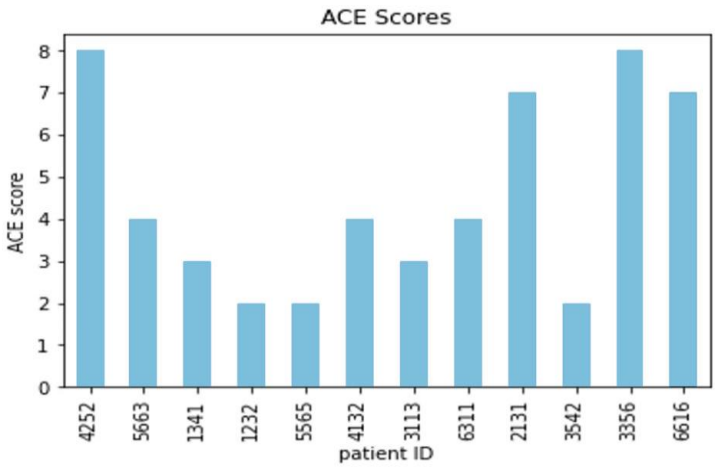
Adverse Childhood Experiences (ACEs)

Adverse childhood experiences (ACEs) are associated with many negative health outcomes and socioeconomic challenges in adulthood. An individual with an ACE score between 1-3 is considered at "intermediate risk" for toxic stress physiology. If the ACE score is 4 or higher, those individuals are at "high risk" for toxic stress physiology which is linked to significantly worse health outcomes, risky behaviors, low educational attainment, and insecure employment.[13]

The CDC has calculated the effect of adverse childhood experiences on the incidence of chronic illness in the U.S. population. According to the CDC, 12.6% of coronary heart disease, 14.6% of stroke, 24% of asthma, 27% of chronic obstructive pulmonary disease, 5.9% of cancer, 15.7% of kidney disease, 5.7% of diabetes, and 44% of depression is due to adverse childhood experiences. In most cases, adults who report four or more adverse childhood experiences account for more than half of those percentages.[14]

Participants in our pilot had an average ACE score of 4.5. The median ACE score for pilot participants was 4.

Overall ACE Scores (n=12)

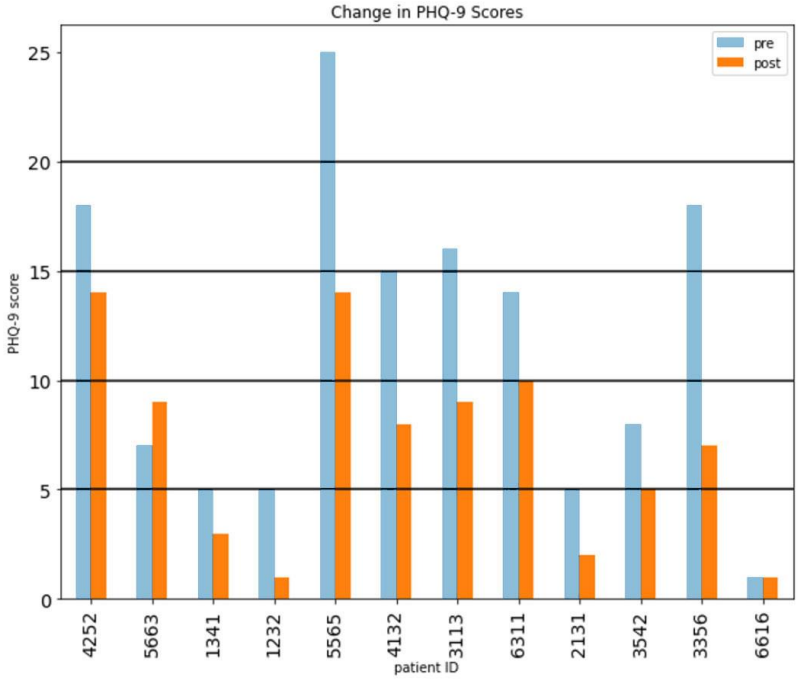


[13] aces aware (2020, April) *ACE Screening Clinical Workflows, ACEs and Toxic Stress Risk Assessment Algorithm, and ACE-Associated Health Conditions: For Pediatrics and Adults*

[14] Merrick, MT, Ford, DC, Ports, KA, et al. (2019) "Vital Signs: Estimated Proportion of Adult Health Problems Attributable to Adverse Childhood Experiences and Implications for Prevention - 25 States, 2015–2017," *Morbidity and Mortality Weekly Report*; 68(44): 999-1005. DOI:10.15585/mmwr.mm6844e1

Patient Health Questionnaire-9

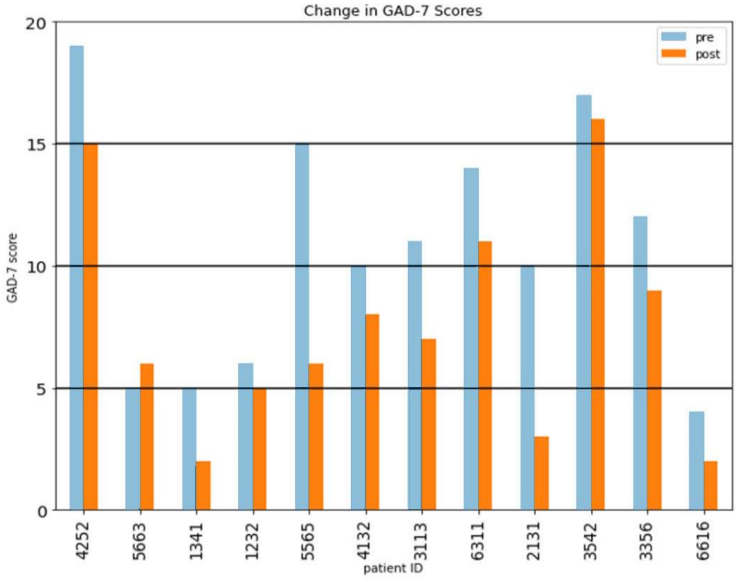
At the start of the pilot, 42% of participants (5/12) reported moderately severe or severe symptoms of depression. After treatment, 25% of participants (3/12) reported moderate depression and the rest had only mild or minimal depression.



Score	Depression Severity
1-4	Minimal
5-9	Mild
10-14	Moderate
15-19	Moderately severe
20-27	Severe

General Anxiety Disorder-7

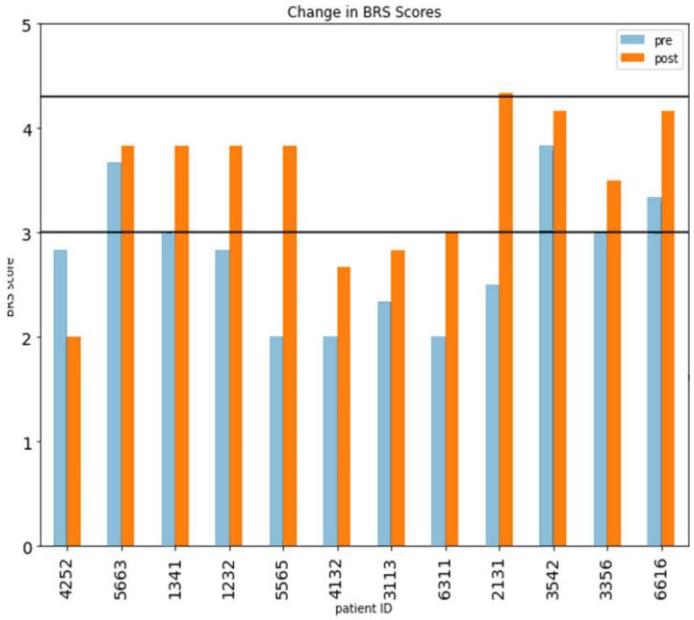
At the start of treatment, 67% of participants (8/12) had moderate or severe anxiety; after treatment, only 25% (3/12) reported moderate or severe anxiety.



	Score	Anxiety Severity
0	1-4	Minimal
1	5-9	Mild
2	10-14	Moderate
3	15-21	Severe

Brief Resilience Scale

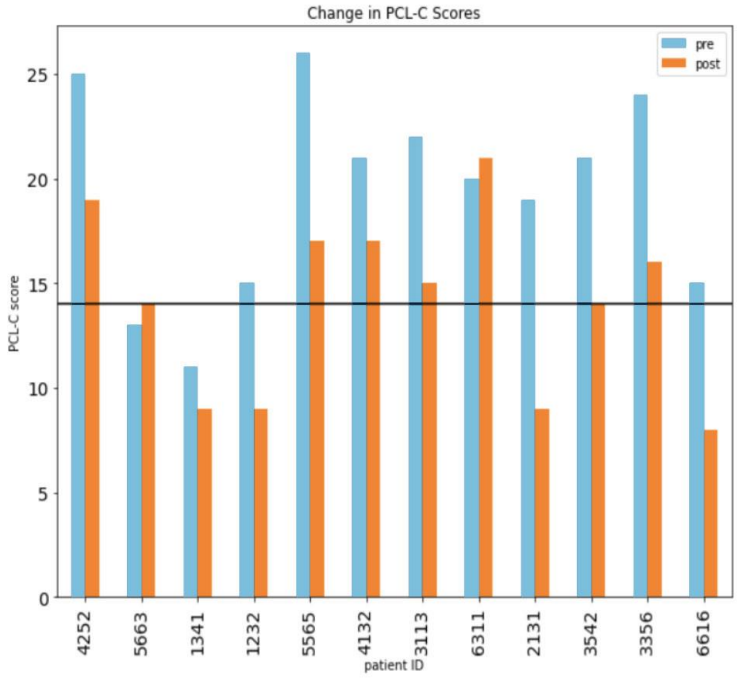
Before treatment, 42% of participants (5/12) reported "normal" levels of resilience. None reported "high" levels of resilience. After treatment, 75% of participants (9/12) reported "normal" or above levels of resilience, with one participant reaching "high" levels of resilience.



Score	Resilience
1.00-2.99	Low
3.00-4.30	Normal
4.31-5.00	High

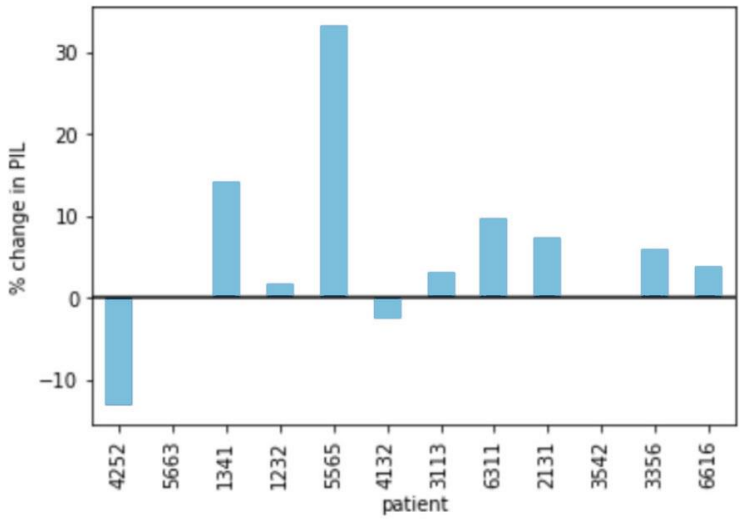
The PTSD Checklist - 6-item Civilian Version

The Abbreviated PTSD Checklist - Civilian Version (PCL-C) clinical cutoff is 14. A score above 14 indicates difficulties with post-traumatic stress. The majority of participants (n=10) scored above this clinical cutoff in their pre-treatment results. At the beginning of treatment, 83% of participants (10/12) reported difficulties with post-traumatic stress. After treatment, that number decreased to 67% (8/12).



Purpose in Life Scale

During the course of treatment, 67% (8/12) of participants had a positive change in their purpose in life scores. The average increase in purpose in life for those who experienced positive change was 9.89%.



Participant Interviews

Qualitative data was collected through one-on-one participant interviews at two separate time intervals: roughly half-way through the program and after the final therapy session. This data was then analyzed to look for common themes across all participants. These themes, designed to reflect target outcomes, are listed below along with the respective frequency of occurrence across all interviews. The frequency represents how many times participants described an experience related to each theme during their interviews and the participant percentage describes how many participants reflected on each theme.

THEME	DESCRIPTION	FREQUENCY	PARTICIPANTS (n=12)
IMPROVED CAPACITY	Developed greater coping skills to navigate trauma history and everyday life	96	100%
SELF-EFFICACY	Improved sense of self-efficacy and confidence in ability to take control over their lives	84	100%
RESILIENCE	Building resilience and ability to thrive in life (e.g., joy, hopefulness, positive life change, and sense of connection)	43	83%
THERAPIST CONNECTION	Positive role of therapist connection and contribution to healing	32	83%
UNIQUE APPROACH	ITT approach is new or different from any other previous therapy experience	26	75%
DECREASE IN SYMPTOMS	Overall decrease in clinical symptoms of depression, anxiety, chronic pain, etc.	15	67%

Patient Reflections:

Six months ago, I was in bed most of the time and miserable with pain and not really wanting to live to be perfectly honest. So, I'm at the point now where my pain level has gone down to nearly not noticeable. I feel just much more capable of managing stressful things as they come up in life. In the past, socializing and dating would be very difficult for me because I had a lot of anxiety; now, my anxiety level has decreased a lot. And to the point where I'm able to overcome that actual hurdle of getting out there and doing stuff where in the past, my anxiety would be so bad that I wouldn't even be able to put myself out there. This work has helped me enjoy life in general and become happy, instead of just not wanting to get out of bed in the morning. This has been a rebirth for me."

- Neighborcare Participant 1341

All right, so I think the word I would use to describe my experience is transformative. I've done talk therapy for years and I'm becoming a talk therapist myself, and honestly this type of therapy I've been doing with [my therapist] has been hands down the most helpful thing I have ever done in any type of therapeutic sense in my whole life. My ability to regulate my emotions is now a skill that I possess. And honestly, I think that in terms of my trauma and my ability to process it, move through it and really come into just a sense of state of alignment and wholeness with myself, I honestly didn't think it was possible. It's been so incredible. I want to learn how to do this myself so I can move forward in my practice and do it with clients

- **Bastyr Participant 1232**

I've tried so many things in the past with traditional therapy, and they weren't really helpful. Working with [my therapist] is totally different, I was really skeptical to start, but I m really shocked how much this has actually helped me and my life. Before, I used to definitely suffer from a lot of depression. But since doing the work with [my therapist], being able to dive deep into oneself, and that internal work has definitely lessened that state of depression and anxiety. I've learned to embrace the change. I've wanted to embrace what's happening around me, and why things happen. So that definitely helped out a lot."

- **Neighborcare Participant 6616**

I think, for me, what has made this really unique though, and I think very valuable, especially for people who hold marginalized identities, is that my work with [my therapist] has not only been centered on feeling safe to be in my body and trust the experiences of my body, but part of that is not just trusting my own internalized experience, but also getting a better understanding of what has happened externally and how to make sense of that and align that. It's a multiple layered process that we've really focused on together [...] I know that the history of somatics comes from other schools of thought. I think it brings in a piece about knowledge and self-knowledge that isn't often represented in this field. I think that can be really empowering, especially for people who are in marginalized communities, where the larger system is saying focus on yourself. If you're experiencing a problem, it's because there's something there with you and we're going to find out what that is and then tell you what it is, and you're going to work on it. Where I think this is really different. It's like, "Okay, you're having these experiences that are uncomfortable, that are distressing. Let's talk about how we can work through and make those experiences more manageable and tolerable, but without stigmatizing further."

- **Bastyr Participant 5663**

Participant Conclusion

The quantitative data is confirmed by participants 'reflections on the process as a whole and the changes they noticed in themselves both internally and externally. The quantitative and qualitative results obtained from

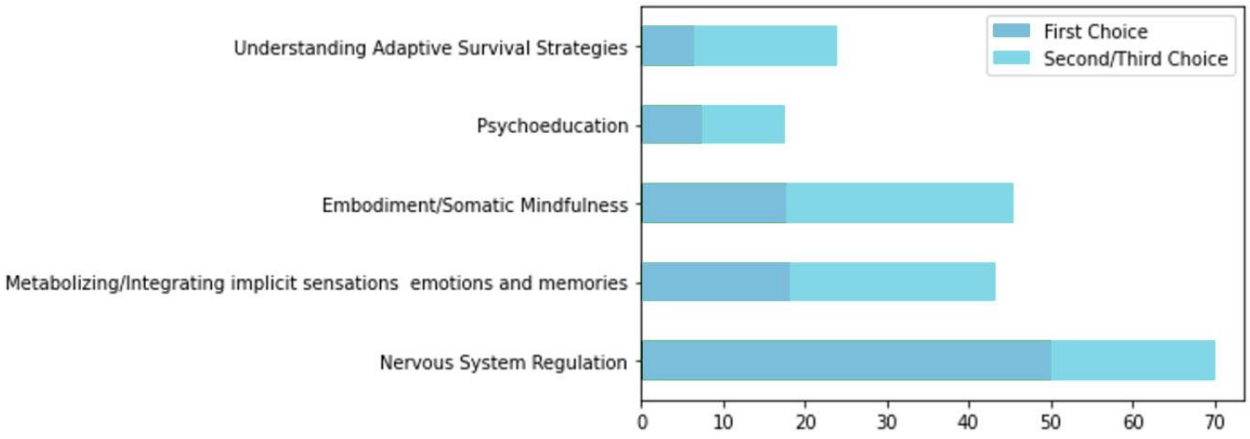
participants confirm that they experienced positive outcomes during the course of their treatment. The PHQ-9, GAD-7, and PCL-C rating scales demonstrated that participants achieved clinically significant improvement in symptoms of depression, anxiety, and post-traumatic stress. In addition to a reduction in symptoms, participants reported increased resilience, improved self-confidence and self-reliance, and a greater sense of purpose in their lives. These outcomes were confirmed by results from the BRS and the PIL scales.

During the interview process, participants described how the pilot treatment transformed their lives by reducing the severity of their symptoms, bolstering their ability to bounce back from setbacks, improving their capacity to tolerate challenging life circumstances and distressing emotions, and fostering greater self-reliance in the face of adversity. Participants also remarked on the importance of their relationship with their therapist. Participants felt their therapist listened to them, valued their life experiences, empathized with their struggles, and cared about them as a person. This led to a safe, secure, attuned relationship that offered participants a chance to heal and move beyond the adaptive survival strategies that no longer served a useful purpose in their lives. Patients described how they felt better able to integrate their sensations, memories, and emotions in ways that left them feeling more empowered and in control of their own lives. The changes they described that took place in the healing therapeutic space are reflected in the clinically significant improvements in the rating scales they completed before and after treatment.

Clinician Interviews & Feedback

Clinician notes and interviews were collected and analyzed to capture their application of the ITT approach, their understanding of participant progress, and their experience with the pilot process overall.

One theme that was consistent throughout the feedback we received from both participants and clinicians was the uniqueness of the ITT approach. Based on extensive interviews with participants and therapists, it appeared that the pacing, sequencing, and personalization of this approach gave clinicians the freedom to meet patients where they were at during each clinical encounter. Clinicians were asked to rank which ITT intervention they used during each session. The results indicate that clinicians always used a combination of interventions that were carefully titrated to each participant's unique situation. However, as the graph below demonstrates, we can draw some conclusions about how the group of therapists as a whole used the ITT interventions.



Therapists relied most often on Nervous System Regulation as a foundation for most clinical encounters. Therapists told us they used this intervention to gauge where participants 'nervous systems were "parked" at the beginning of

most sessions. The Psychoeducation intervention was used almost exclusively at the beginning of treatment, but sometimes therapists would revisit certain points they wanted to reinforce in subsequent sessions.
The Embodiment/Somatic Mindfulness and Metabolizing/Integrating interventions were used less often than Nervous System Regulation. They were used as a second or third choice during most sessions. Therapists explained that they worked with participants to settle their nervous system sufficiently in order to help patients develop a greater awareness of their bodies. These two interventions: Nervous System Regulation and Embodiment/Somatic Mindfulness are "bottom up" interventions that help participants develop greater interoceptive capacity and self-regulation. The Metabolizing/Integrating implicit sensations, emotions, and memories intervention is a bridge between the "bottom up" approaches that focus on bodily sensations and the "top down" approaches that involve internal reflection and higher-level cognitive capacities. It makes sense that as a bridge between "top down" and "bottom up" interventions, Metabolizing/Integrating would be frequently used as a second and third choice as the participants progress in their treatment course.

The Understanding Adaptive Survival Strategies intervention is an entirely "top down" approach. It involves attentive reflection on each participant's unique history and lived experience. This becomes a potent therapeutic tool as participants work on getting in touch with their implicit and explicit memories and interoceptive awareness. It is used less often in sessions than the other types of interventions, which is why clinicians rank it in the first position less often. However, it does show up frequently as a second or third choice.

Interviews

Clinicians spoke to the uniqueness of this approach and the significant "value add" this process had for their own sense of professional and personal well-being. They all witnessed growth in their clients and felt as though being a part of this project was mutually beneficial for themselves and their clients.

Clinician Reflections:

> "Well, I don't know about any of the rest of you, but I've got a trauma history. And so that factors in with the sense of being supported and being part of a container. And there's a subtle something in being approved of, getting to be one of the providers in the pilot is at least, at a minimum an implicit endorsement of me and what I have to bring as a practitioner and certainly an opportunity. The whole sense of not being out in the wilderness."
>
> *- Clinician Focus Group*

> "I think before this study I had that perception, this work is just so darn slow and yet documenting it helped me perceive that: "Oh right. Things are moving. She did report this." So my overarching belief that this is a slow process began to change as I realized: "No, I'm documenting that things are changing. It's just this slow process." And for me to just accept [...] that's okay."
>
> *- Clinician Focus Group*

> "And so both of my clients were madly in love with the work we were doing. Like this is just awesome, phenomenal. I just feel…I loved it. The pilot structure, we had a lot of freedom [...] We've got all this mix of training and I took that and ran with it. So that was a tremendous gift and sense of freedom. And also, I think helped to consolidate and allow the move forward [of] my own sense of myself as a practitioner and for seeing my own skills and sensitivities to evolve and develop."
>
> *- Clinician Focus Group*

> "The container was just a lovely place to feel like a team and working as a collective to support people. So hearing each other's stories, the reminders of the specifics of doing this trauma resilience work. Being a part of a group just feels

> good. And having a shared focus and mission. And the biggest one that's yours about accessibility and getting this not so spread out and inaccessible. So that was a really lovely team mission to be a part of."
>
> *- Clinician 1454*

Clinician Conclusion

In addition to understanding their application of the ITT approach, The Trauma Foundation wanted to assess the clinicians 'experience with the pilot process and what effect their participation in the pilot had on them. One of the goals of the pilot was to learn what happens if clinicians are given the necessary tools to pace, organize, and personalize trauma treatment to produce successful outcomes for patients.

It's clear that the therapists 'application of the ITT approach through pacing, organizing, and personalizing trauma treatment produced successful outcomes for participants. We also learned that the clinicians themselves were positively impacted by their participation in the pilot in some unexpected ways.

Clinicians reported that the pilot allowed them to pay closer attention to the process of transformation that participants experienced during the treatment process. The pilot process, which included structured notes, surveys, and interviews, prompted clinicians to reflect on the therapy process in new ways compared to their usual practice. This allowed clinicians to see the growth that was taking place in participants' lives that they sometimes missed in their usual therapy practice. The clinicians reported that this was validating and empowering for them as mental health professionals.

Some therapists in the pilot reported that they had their own personal trauma history. We know from the Kinsey Institute Traumatic Stress Research Consortium that many of the trauma therapists in their network identify as trauma survivors[15]; our pilot sample of therapists is not unusual in that regard. This is also true for many of the individuals in the pilot's cohort of Bastyr graduate students who are training to be future therapists.

The therapists in the pilot reported a sense of gratitude and empowerment as a result of their professional collaboration with peers and with The Trauma Foundation. Those therapists with a history of adverse childhood experiences reported that the support and encouragement they received during the pilot was especially validating.

The clinicians reported that the professional collaboration, financial support, and the unique ITT framework allowed them an opportunity to grow and develop as professionals in ways they had never experienced working in their individual practices. The clinicians reported that the framework of the ITT approach and the pilot structure allowed them to pace, organize, and personalize the various tools and modalities they were already trained to provide in more effective ways. The growth they witnessed in their clients reaffirmed and validated the clinicians' role in helping clients heal from trauma.

Implications

The Integrative Trauma Therapy pilot, which The Trauma Foundation conducted in 2021, served two purposes. First, to assess the feasibility of providing an integrative approach to trauma treatment. And second, to understand how the ITT approach can support clinicians in delivering a vitally necessary form of mental health treatment for individuals with unresolved trauma often unrecognized or inadequately treated in the current healthcare system.

[15] The Kinsey Institute (2020, March) *The Traumatic Stress Research Consortium Newsletter*

The pilot treatment was provided by a small cohort of experienced clinicians who were trained in multiple healing modalities that specifically address trauma. The cohort of participants in our pilot came from diverse socioeconomic backgrounds, but all had similar histories of trauma, adverse childhood experiences, and chronic stress. The results of the pilot demonstrate that it's possible to recruit a diverse group of participants who are willing to engage in long-term therapy and adhere to a structured treatment protocol.

The pilot also proved that the application of the ITT approach through pacing, organizing, and personalizing trauma treatment produced positive outcomes for participants. The results showed that participants achieved clinically significant improvement in symptoms of depression, anxiety, and post-traumatic stress. Participants also experienced increased resilience and a greater sense of purpose in life.

There are multiple implications of The Trauma Foundation's 2021 Pilot. We chose to highlight three, which are detailed below.

The Need to Develop and Support Trauma Clinicians

The clinicians in the pilot had over 75 years combined experience in practice and were trained in an average of 8.6 healing modalities to treat trauma. This level of training and experience is not common in most healthcare settings. Many types of trauma treatment are not offered in most graduate training programs. After becoming licensed and certified, many therapists find it helpful to expand their knowledge of trauma-specific treatments. Their only options are to pursue CME education classes or private training programs in specific therapeutic methods. These types of training programs are often expensive and time-consuming. Individuals in private practice don't always have the resources or time to pursue additional training. Institutional healthcare systems that employ therapists, such as clinics and hospitals, rarely allocate budget to make these types of training programs available to their staff.

The Trauma Foundation supports the adoption of a wider variety of trauma treatment methods among more service providers, including individual clinicians as well as clinics, hospitals, and health systems. We would like to see these methods become more accessible so that more providers can acquire the training and tools to be more effective at treating trauma. At the same time, we believe the results of the 2021 pilot demonstrate that clinicians need, and are asking for, an approach to trauma healing that integrates multiple modalities and provides a framework that allows them to pace, organize, and personalize their treatment to be more successful in helping those struggling with unresolved trauma.

In addition to a more integrative approach to the delivery of trauma treatment, clinicians are asking for education and collaboration as they navigate the fragmented and complex system of healthcare services. Many clinicians working in private practice feel isolated from their colleagues in other clinical settings, and many clinicians who treat trauma and work in large health systems feel just as isolated from their peers. Even at the scale of the 2021 Trauma Foundation pilot, we witnessed positive network effects from collaboration among clinicians. They reported that the support, guidance, and education that was available through their participation in the pilot afforded them opportunities for growth and professional development they did not have before. There need to be more professional learning and peer support networks for service providers delivering trauma treatment.

Scaling Trauma Care Through Institutional Healthcare Providers

The Trauma Foundation recommends a multi-tiered approach to enhance the delivery of trauma services across a broad range of health systems, including community-based, academic, regional, and national hospitals and their affiliated clinics.

Level 1: Trauma-Informed Training

The most basic level offers trauma-informed knowledge and tools to everyone within a healthcare system. This includes anyone in the organization who interacts with patients, such as front-office staff, auxiliary staff, and medical providers.

Level 2: Basic Clinical Skills

The second tier is focused on enhancing basic clinical skills for providers who are directly working with trauma survivors and those struggling with a history of adverse childhood experiences. This level of service is centered around basic affect and nervous system regulation and allows providers to stabilize and establish safety for patients often overwhelmed by trauma-related symptoms.

Level 3: Advanced Clinical Skills

The third tier is focused on more advanced trauma treatment. At this level, clinicians provide more comprehensive trauma care using an integrated approach to treatment, similar to the ITT approach used in the pilot, and need to be cross-trained in multiple trauma healing modalities.

All levels will involve education for providers about the specific needs of people in socially and economically disadvantaged communities that are often underserved by healthcare systems. Members of these communities are disproportionately affected by trauma.[16] They also have less access to primary healthcare and to specialty care such as trauma treatment. This population is more likely to face an increased disease burden and more severe socio-economic challenges from adverse childhood experiences. Healthcare providers and health systems need to make available more trauma-related resources to provide effective care for these individuals, families, and communities.

Need for Trauma Informed Systems Change

For too long, the healthcare system, and even the mental health field, has failed to incorporate the science of how toxic stress physiology impacts the growth and development of individuals with adverse childhood experiences into the services and care it provides. More resources are needed to educate professionals and the general population about the impact of adverse childhood experiences on lifelong health outcomes and socioeconomic opportunity.

Multiple medical conditions have been directly linked to adverse childhood experience exposure. This means that if we can prevent exposure to adverse childhood experiences, we can reduce the incidence of certain medical conditions by as much as 44%.[17] Just as important, by preventing exposure to adverse childhood experiences, we can also improve socioeconomic opportunities for many people, including increased access to health insurance,

[16] Sheats, K.J., Irving, S.M., Mercy, J.A., et al. (2018) "Violence-related disparities experienced by black youth and young adults: opportunities for prevention", *American Journal of Preventative Medicine* 55(4): 462–9.

[17] Merrick, M.T., Ford, D.C., Ports, K.A., et al. (2019) "Vital Signs: Estimated Proportion of Adult Health Problems Attributable to Adverse Childhood Experiences and Implications for Prevention - 25 States, 2015–2017," Morbidity and Mortality Weekly Report

higher levels of educational attainment, and more secure employment. Adverse childhood experiences contribute to enormous social costs and a large health burden for individuals, families, communities, and society.

The good news is that adverse childhood experiences are preventable. There are multiple effective strategies based on best practice evidence to reduce the risk of exposure to adverse childhood experiences.[18] We can reduce the consequences of adverse childhood experiences and help protect future generations from exposure to the high levels of abuse, neglect, violence, and substance abuse that are prevalent in too many homes today.

The main implications of The Trauma Foundation's 2021 Pilot are related to improving the delivery of trauma treatment services and enhancing the ability of our healthcare workforce to treat trauma survivors more effectively. However, the broader implications involve leveraging our understanding of the long-term effects of toxic stress physiology to improve the quality of people's lives and the health and well-being of the population. There is a need for a comprehensive and systems-level approach for prioritizing the prevention of adverse childhood experience exposure, as the infographic below illustrates.

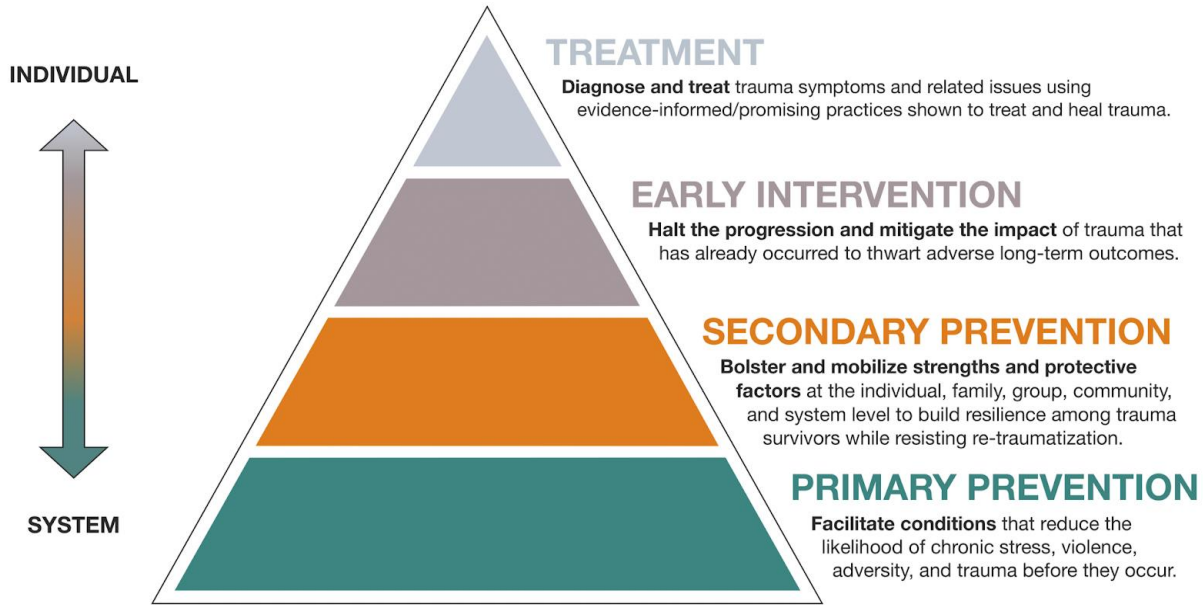


Image Credit: Campaign for Trauma-Informed Policy and Practice[19]

The Trauma Foundation is committed to working with healthcare systems, educational partners, rehabilitation centers, correctional facilities, civic organizations, government agencies, and individuals to facilitate conditions that reduce childhood adversity, promote protective factors that build resilience, mitigate the transmission of trauma, and diagnose and treat trauma symptoms.

[18] CDC.(2019) *Preventing adverse childhood experiences (ACES): leveraging the best available evidence*. Atlanta, GA: US Department of Health and Human Services

[19] Campaign for Trauma-Informed Policy and Practice

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