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Biosuggestive Therapy in the Correction of Mental Trauma

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Abstract

Biosuggestive Therapy (BST) is an innovative Ukrainian psychotherapeutic method specifically developed in wartime conditions for the rapid correction of the consequences of psychological trauma. The approach integrates verbal and non-verbal suggestion techniques, including the therapist's modulated voice and either imagined or gentle real touch, to induce a therapeutic state of relaxation and perceived safety.

BST is adapted to the specific needs of individuals who have experienced traumatic events and can be used both individually and in group formats, including online. The current evidence base for the method is based primarily on expert opinion, clinical observations, and preliminary studies, as randomised controlled trials have not been conducted due to the ongoing crisis conditions.

Preliminary findings indicate a prompt reduction in psychosomatic symptoms (such as anxiety, pain, and sleep disorders) following only a few sessions. However, the method is still regarded as a conceptual hypothesis that requires further scientific investigation.

The article deals with the theoretical foundations of BST (including suggestive therapy, polyvagal theory, somatic approaches, and the neurobiology of trauma), provides a detailed description of the session methodology, presents available empirical data and clinical observations, and discusses ethical considerations related to the application of the method.

In conclusion, the authors emphasise the limitations of the current evidence, advocate for the ethical use of BST, and invite the international community to collaborate in further research and development of this promising approach to trauma treatment.

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Introduction

The ongoing Russian military aggression has placed an unprecedented strain on the psyche of the Ukrainian population. Citizens are continuously exposed to war-related stressors, leading to elevated levels of stress hormones, dysregulation of the nervous system, and disruption of homeostasis. As a result, there has been a sharp increase in the demand for rapid and accessible methods of recovery from both acute and chronic psychological trauma among both military personnel and civilians (Sayed et al., 2011).

Recently, Ukrainian mental health professionals have benefited from the trauma expertise of colleagues in the US, UK, Israel, Austria, and elsewhere. However, many Western therapy models have not been fully adapted to the extreme conditions and realities of the war in Ukraine. In a context of persistent danger, limited resources, and widespread traumatisation, traditional long-term therapeutic approaches are often impractical or inaccessible.

In response to these challenges, and building on international experience, Ukrainian psychotherapists have developed their own adaptive trauma-informed interventions. One such novel domestic approach is **Biosuggestive Therapy (BST)** – a method specifically designed to accelerate recovery from combat stress and psychological trauma. Although certain elements of BST have been evolving over the past decades, it is during the recent years of full-scale war that the method has undergone intensive refinement and demonstrated practical effectiveness with both Ukrainian military personnel and civilians (Gubska et al., 2023).

BST has already gained recognition at the national level: it is recommended for implementation by leading professional organisations (such as the Ukrainian Institute of Psychology and the League of Psychiatrists and Psychotherapists) and has been included by the Ministry of Veterans Affairs in the list of essential psychotherapeutic rehabilitation interventions.

However, BST remains largely unknown internationally, as it has only recently begun to be presented outside of Ukraine. The aim of this article is to present a conceptual model of Biosuggestive Therapy and its theoretical basis, describe the protocol and features of the method's application, and summarise the available clinical data regarding its effectiveness. Given the current absence of randomised controlled trials, BST is not presented as a standardised treatment modality but rather as a promising hypothesis requiring further scientific substantiation. The authors also discuss the ethical dimensions of applying this method in the context of humanitarian crises and emphasise the need for international collaboration to strengthen the evidence base for BST.

Theoretical Background

Biosuggestive Therapy (BST) conceptually integrates approaches from suggestive (i.e., hypnotic or persuasive) psychotherapy with contemporary insights from trauma neurobiology and autonomic nervous system regulation. The author of the method is Aleksandr Strashny (Strashny, 2024). As the name implies, the method is based on suggestion, i.e. psychotherapeutic influence achieved through the process of suggestion. Unlike traditional hypnosis or autogenic training, where suggestion is usually purely verbal, in BST it is carried out simultaneously verbally and non-verbally. Specifically, during a session, the therapist utilises a special intonational modulation technique involving overtone-rich vocal patterns, and – subject to the client's consent – applies light rhythmic touches to specific areas of the body. This multi-sensory engagement, involving auditory and tactile stimuli, facilitates deeper integration of the therapeutic effect (Lucas et al., 2015).

BST is rooted in classical principles of suggestive therapy but introduces several critical modifications: it does not require the induction of a deep trance (a light trance or relaxed state is sufficient), and the content of the suggestions is carefully standardised and tailored to trauma-related symptomatology. Moreover, the addition of touch to verbal suggestions brings BST closer to body-oriented approaches and takes into account the role of the body in experiencing and healing trauma.

The main hypothesis of the mechanism of action of BST is the activation of physiological processes of relaxation and recovery through stimulation of the parasympathetic nervous system. During a session, when the client enters a light trance-like state of relaxation, parasympathetic activity predominates – this is neurophysiologically antagonistic to the "fight or flight" response. Such activation facilitates the inhibition of maladaptive neural patterns associated with trauma and enhances connectivity in neural circuits related to a sense of safety and well-being. In essence, this leads to repatterning of the nervous system: instead of entrenched stress responses, new associations of calm and security are formed.

The verbal suggestions delivered during relaxation are specifically designed to reduce psychophysiological hypersensitivity to pain and anxiety. Studies show that trance suggestions can reduce hyperalgesia, or excessive sensitivity to pain. As a result, the pain threshold and emotional distress tolerance are increased, leading to an improved balance in the autonomic nervous system (Oliveira et al., 2023). These effects are consistent with the principles of Stephen Porges' Polyvagal Theory, according to which creating a sense of safety and social interaction activates the ventral vagal complex and inhibits fear responses (Porges, 2011).

BST explicitly incorporates such “safety signals” – including the therapist’s gentle, modulated voice, the supportive presence of a group, and reassuring physical touch – to soothe the client’s autonomic nervous system.

Figure 1 schematically illustrates the three primary autonomic states described in Polyvagal Theory (Porges, 2011):

- The Safe State (social engagement under ventral vagal dominance),
- The Mobilised State (stress-related sympathetic activation), and
- The Immobilised State (freeze response under dorsal vagal dominance).

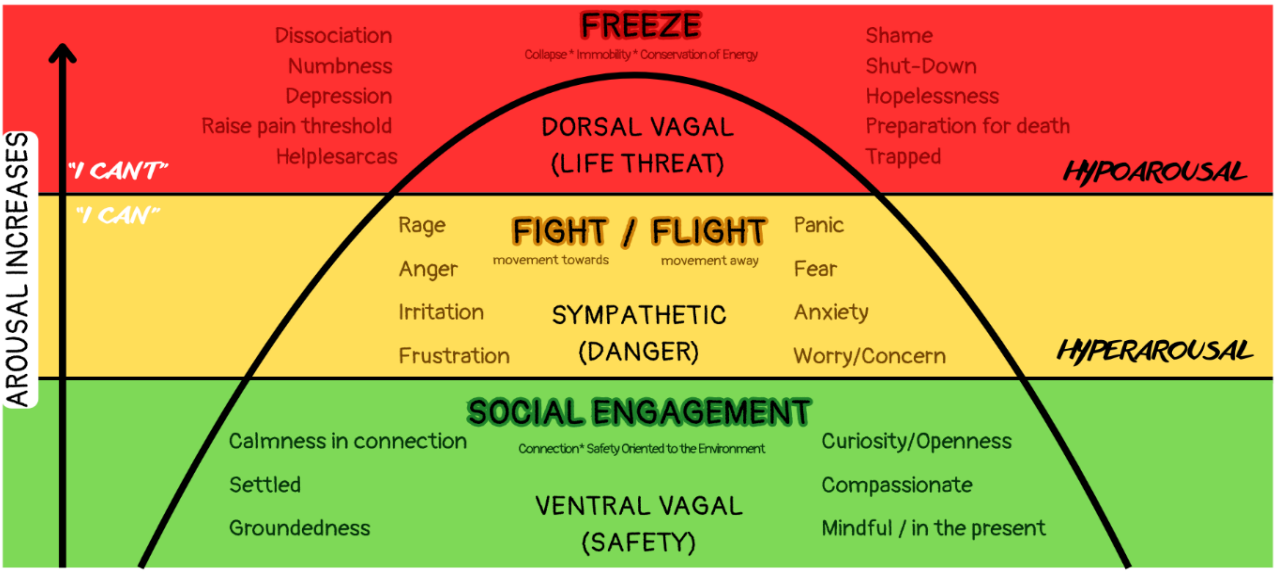

Figure 1: The Polyvagal Concept of Three Autonomic Nervous System States, adapted from Stephen Porges’ theory. In the safe state (green), the individual feels relaxed and open to social engagement (ventral vagal activation); in the mobilised state yellow, the person is prepared for fight or flight in response to threat (sympathetic system activation); in the immobilised state red, the person enters a state of shutdown or dissociation in the face of extreme threat (dorsal vagal activation). BST is aimed at guiding the client's nervous system back to a safe green state.

BST is designed to guide the client from mobilised or immobilised states toward the state of safety, utilising a strategic combination of verbal and non-verbal therapeutic techniques.

In addition to its neurophysiological foundations, BST relies on an understanding of the psychological mechanisms of trauma and healing. Contemporary theories of traumatic stress emphasise the importance of integrating traumatic experiences into a narrative and bodily sensations into a holistic experience (B. van der Kolk, 2015). Methods that combine work with the body and mind have gained momentum in recent decades as a complement to traditional cognitive therapy. In particular, somatic methods – such as Peter Levine's Somatic Experiencing, Sensorimotor Psychotherapy, and various mindfulness-based body practices – demonstrate that focusing on bodily sensations and movements can facilitate the discharge of "frozen" traumatic energy and restore autonomic regulation (Payne et al., 2015).

BST resonates with these frameworks by utilising therapeutic touch and relaxation to process the psychosomatic manifestations of trauma. In terms of its components, the method occupies a conceptual middle ground between hypnotherapy and somatic therapy. Similar integrative attempts to combine suggestion and sensory input can be found in other innovative trauma interventions. For example, the Havening Technique (developed by Ronald Ruden after 2001) uses gentle skin stroking combined with positive visualisation to reduce fear and reprocess traumatic memories (Ruden, 2018) – an approach that shares foundational similarities with BST.

BST differs from classical hypnosis through its group-based induction format and the active engagement of the body, while it stands apart from most body-oriented practices through the use of structured verbal suggestion. In this regard, BST can be considered a unique integrative conceptual model that combines the strengths of different approaches: the power of suggestion, somatic resource therapy, and social support of the group.

It is important to emphasise that this model is currently a hypothetical construct that requires thorough validation. The theoretical framework of BST outlines plausible pathways of therapeutic influence, supported in part by neuroscience and psychology data, but final conclusions about the effectiveness of the mechanisms should be drawn on the basis of future research.

Methodology

Design and General Principles.

Biosuggestive Therapy (BST) has been developed as a short-term intervention, suitable for implementation in contexts characterised by limited resources and widespread traumatisation. The method is designed to produce rapid therapeutic effects and is relatively easy to implement: only a few days of specialised training are required for a practising psychologist to acquire the basic skills necessary for conducting BST sessions. This expedited training of specialists was critical during the war, when the demand for help far exceeded the number of experienced trauma therapists.

BST can be conducted individually or in a group format, depending on the capabilities and needs - the method is equally applicable to both forms of work. At the same time, practice has shown that the group form has certain advantages: the effect of therapy is enhanced by the phenomenon of group dynamics and mutual support of participants. In particular, newcomers are positively affected by the presence in the group of other clients who have already experienced improvement in previous sessions - this increases their trust in the process and motivation to recover.

Structure of the Therapeutic Session

The classical BST protocol is built on a clearly defined structure and consists of three main phases:

Individual Therapeutic Conversation (Pre-therapeutic Phase). Each session begins with a brief one-on-one conversation between the therapist and the client – even in cases where a group session will follow. The purpose of this exchange is to assess the client's current condition, establish therapeutic rapport, and prepare the individual for suggestion. The structure of an individual conversation is designed to gradually shift the client's focus from distress to resources: positive changes since the previous session are discussed, the current emotional state is explored, and specific complaints are clarified. The therapist gently corrects the patient's dysfunctional thoughts or fears, creating expectations of recovery. This phase initiates a transformation process even before the suggestive work begins, moving the client from a neurotic pattern of distress toward a pattern of well-being. This phase typically lasts no more than 10–15 minutes.

Group Induction (Preparatory Phase of Suggestive Relaxation). In group settings, the next step is a collective induction into a light trance state. Participants sit comfortably in a circle, and an atmosphere of calm and mutual trust is fostered. The therapist addresses the group in a soothing, evenly modulated voice, guiding them through simple synchronised breathing and muscle relaxation exercises. This brief meditative segment helps equalise the group's emotional tone, reduce initial anxiety, and prepare participants for the suggestion process. The group setting facilitates faster relaxation due to the phenomenon of emotional contagion – when several participants begin to calm down, their state influences others in the group. In individual sessions, this induction phase is replaced by a continuation of the earlier conversation, now shifting toward relaxation-oriented suggestions delivered in a calm, rhythmical tone. Group induction is a feature of BST: it not only allows for time-efficient delivery of therapy to multiple clients simultaneously but also amplifies therapeutic effectiveness through the group's supportive presence.

Biosuggestive Relaxation-Meditation (Core Therapeutic Phase). Following induction, the core part of the session begins – a scripted therapeutic meditation incorporating elements of suggestion. The suggestion script is either pre-recorded as an audio track. Often, an audio recording featuring the therapist's voice over calming background music is used, ensuring standardisation and precision of phrasing.

The relaxation meditation typically lasts ~18 minutes. During this phase, participants sit with eyes closed (or lie down if preferred), focusing on their bodily sensations. The therapeutic script includes a series of positive, suggestive images and affirmations targeting symptom relief: reduction of muscle tension, pain, and anxiety; restoration of calm, safety, and a sense of control over one's state.

The key element is a light rhythmic touch of the therapist to the client (or self-hypnosis touch), which occurs in synchronisation with the words of suggestion. The therapist touches certain points (on the patient's shoulder, back, or arms) with the palm of his hand in a predetermined rhythm, which enhances the perception of the images being suggested. If necessary, assistants are present in the group to provide such tactile contact with each participant.

Touch is used only with the client's explicit consent; prior to starting the therapy course, each participant is informed about the method and decides whether physical contact is acceptable.

Experience has shown that most traumatised people respond positively to supportive touch, as it adds a sense of security. However, an alternative option (and the only one possible in the online format) is imaginary touch - when the patient visualises the therapist touching the specified

points during meditation. This technique is based on neuropsychological data: the human brain activates sensory areas almost as much with an imaginary touch as with a real one. (Lucas et al., 2015; Chan & Baker, 2015).

In particular, studies have shown that self-touching the body gives a minimal reaction (about 10% of the possible), the touch of another person gives the maximum reaction (about 100%), and an imaginary touch of another person gives an intermediate reaction (~60-70%).

Thus, during an online BST session, where real contact is not possible, the effect of virtual touch is achieved by the client simply imagining the therapist's touch - this is enough for ~70% of the impact, similar to an offline session.

Session Duration and Treatment Course

The total duration of one BST session is about 30-40 minutes. The recommended therapeutic course is eight sessions (with a frequency of about 1-2 per week). Such a relatively small number of sessions is usually sufficient to achieve a lasting improvement. Moreover, patients often feel significant relief after 1-2 sessions. According to clinical observations by Ukrainian BST practitioners, after completing a full eight-session course, roughly 30–60% of clients (depending on initial symptom severity and other factors) experience a near-complete resolution of their primary complaints. These figures are drawn from preliminary clinical reports in Ukraine (Osokina et al., 2017; Koshyrets & Shkarlatiuk, 2022; Venger & Ivanitska, 2023) and demonstrate the potential of BST as a short-term intervention. It should be emphasised, however, that these outcomes are from uncontrolled case series; controlled studies are needed to confirm the efficacy and clarify what proportion of improvement is specifically attributable to BST techniques.

It is important to note that BST does not lead to dependence – neither psychological attachment of the patient to the therapist nor “addiction” to the method itself. It is important that CBT does not cause dependence, neither psychological attachment of the patient to the therapist nor "addiction" to the technique itself. This means that clients, having felt relief, do not need constant repeated support sessions and can continue to maintain their improved state on their own, using the relaxation skills acquired during therapy. The method also has no side effects and is easily tolerated by clients. If anything, the main caution is to ensure proper consent and comfort with touch, as discussed, and to integrate BST appropriately with other treatments when needed (see Ethical Considerations below).

Adaptation to the Client's Condition

The therapeutic relaxation scenario may vary slightly depending on the client's main symptoms. For example, if the patient has manifestations of sympathetic system hyperactivity (anxiety, tension, insomnia), the suggestions emphasise calming and relaxation. And vice versa, if apathy and depressive "freezing" are observed, then the text contains more images of activation, of returning to life. These adaptations are consistent with the polyvagal model, which seeks to balance sympathetic and parasympathetic system activity.

Several standard scripts have been developed for different clinical presentations; however, when dealing with complex or comorbid states, a universal BST relaxation-meditation protocol is applied. This script includes general formulations for stress recovery and well-being enhancement and is effective across a wide spectrum of conditions. It is the most commonly used version in practice, serving as a baseline intervention when individual customisation is not feasible or necessary.

Indications and Contraindications

BST is indicated for dealing with the consequences of acute and chronic traumatic events, especially when the trauma manifests itself at the psychosomatic level. The method is most often used among patients with the following symptoms of post-stress disorders:

- Anxiety
- Hyperarousal
- Inner tension
- Fear
- Sleep disorders (insomnia, nightmares)
- Psychosomatic pain (headaches, migraines, muscular pain, unexplained neurological symptoms)
- Functional somatic disorders (e.g., stress-induced digestive issues, palpitations)

Practical experience and early studies have shown the effectiveness of BST in correcting a wide range of conditions, including:

- Anxiety and depressive disorders
- Adjustment disorders
- Psychosomatic illnesses
- Combat stress relief
- Prevention of PTSD in military personnel

The method has been successfully used for adults (including the elderly), as well as for children and adolescents with behavioural problems due to trauma.

However, there are specific contraindications where the use of BST is either inadvisable or requires postponement:

1. Lack of prior medical evaluation – Therapy is deferred until a physician confirms that somatic complaints do not require urgent medical intervention.
2. Acute psychotic or paranoid symptoms, or severe behavioural disorganisation – Suggestive techniques are contraindicated due to the risk of unpredictable responses.
3. Alcohol or drug intoxication – Sessions are postponed until the client is sober.
4. Somatic conditions that interfere with group work – For example, febrile states or infectious illnesses (e.g., flu) preclude participation for safety reasons.
5. Situations where deep relaxation is inappropriate – For instance, it is not advisable to conduct relaxation sessions for military personnel immediately prior to active combat operations, as it may reduce operational readiness.
6. Lack of informed consent – As previously noted, participation in BST requires explicit client consent for each component (suggestion, touch). If the client does not consent, therapy is not administered.

These restrictions are intended to ensure the most ethical and safe application of BST in clinical practice. Therapists using the method are obligated to act in accordance with professional standards: assessing client suitability, explaining the intervention, obtaining consent for each component, and avoiding any form of manipulative influence.

BST is considered a complementary method – it supplements rather than replaces other necessary forms of treatment. If indicated, patients are encouraged to continue prescribed pharmacological treatments or other psychotherapeutic interventions concurrently with BST.

Online Format

A significant achievement is the successful adaptation of BST Therapy to the online mode, which has become relevant both during the COVID-19 pandemic and in wartime (when many clients or therapists are displaced, at the front line, etc.).

The main question was: how to replace the component of real touch through the screen? The solution was the aforementioned imaginary biosuggestion when the client puts his hand to a certain part of his body (or simply imagines touching it) when he hears the therapist's corresponding suggestive command.

Experience with this approach has demonstrated that the effectiveness of online BST sessions is comparable to in-person delivery. Patients report experiencing a felt sense of the therapist’s presence and group connection, even via video conferencing, and imagined touch often elicits tactile and thermal sensations similar in intensity to real physical contact.

The scientific basis for this phenomenon is the research of neuropsychologists who have proven the brain's ability to distinguish between its own and someone else's touch, suppressing the sensations of self-touch and enhancing the sensations of external influence. According to these data, when a person touches himself or herself, the activation of the sensory cortex is minimal, but when he or she is touched by someone else, it is much higher (Boehme et al., 2019). It is interesting that the imaginary touch of another person occupies an intermediate place, activating about two-thirds of the full reaction. This confirms that virtual tactile contact can be sufficient for therapeutic purposes (Chivukula et al., 2021).

Thus, the online BST algorithm includes all the same stages, namely:

- Individual therapeutic dialogue,
- Group induction,
- Audio-guided relaxation, with the role of physical touch replaced by verbal suggestion, instructs the client to touch themselves or imagine being touched.

This approach appears to have proven to be both effective and safe, enabling therapists to provide support even to those in remote or hard-to-reach locations.

It is important to note that the therapist in an online session is particularly careful about safety: he makes sure that the client is in a quiet, private place (not driving, not in a war zone, etc.) and has the ability to immediately interrupt the session in case of discomfort.

Thus, the remote format has expanded the availability of BST without significantly losing the quality of the impact.

Evidence and Observations

Since BST Therapy emerged as an emergency response to the challenges of war, its systematic scientific evaluation has just begun. Currently, conclusions about the effectiveness of the method are based mainly on clinical observations and pilot studies conducted by Ukrainian specialists. Formal randomised controlled trials of BST have not yet been published, due to the objective difficulties of conducting research in wartime. Nevertheless, the initial empirical data obtained in hospitals and rehabilitation centres across Ukraine are encouraging.

BST has undergone clinical testing at leading Ukrainian medical universities, resulting in a total of 16 studies and 24 publications in Ukrainian and international academic journals. Below is a summary of the key findings from these studies (most of which were open-label clinical trials, without control groups or based on pre–post comparisons):

Reduction of Chronic Pain in Psychoneurological and Dental Patients.

BST was shown to reduce pain intensity in patients suffering from chronic psychogenic and dental-related pain syndromes. The most pronounced changes occurred in the emotional dimension of pain–i.e., the subjective suffering decreased, even if some physical sensations remained. This aligns with the hypothesis that suggestions of well-being reduce anxiety and catastrophising associated with pain perception (Osokina et al., 2017; Prudka, 2025).

Reduction of Dental Phobia and Anxiety Prior to Medical Procedures.

Applying BST before dental appointments helped stabilise the emotional state of patients with panic-level fear of dental treatment. In a short study (Osokina et al., 2017), even a single session of biosuggestive relaxation prior to a dental procedure significantly reduced patients' anxiety levels compared to their baseline state.

Improved Psychological Well-Being in Anxiety and Depressive Disorders.

Several studies have demonstrated a positive effect of BST on the subjective well-being and emotional state of patients with neurotic disorders. Specifically, among patients diagnosed with generalised anxiety disorder and mixed anxiety-depressive disorder, the addition of BST to standard treatment led to statistically significant reductions in anxiety and depression levels, along with improved psychological well-being (Zelenska & Kraskovska, 2020).

Recovery from Post-COVID Syndrome.

An intriguing application of BST was its use in the rehabilitation of post-COVID patients experiencing lingering psychosomatic symptoms (e.g., chronic fatigue, anxiety, unexplained physical complaints). In these cases, a course of BST facilitated the regulation of psychosomatic stress responses, resulting in improved physical markers (e.g., sleep, appetite, energy) and emotional indicators (reduced anxiety, elevated mood) (Reutskyi & Karepova, 2021).

Correction of Emotional Disturbances in Diabetic Patients.

Another study (Sinaiko et al., 2021) demonstrated the effectiveness of BST as part of the complex treatment of patients with type 2 diabetes mellitus who had concomitant emotional disorders. After BST Therapy, these patients experienced significant improvements in mood and a reduction in stress and anxiety, which ultimately contributed to better control of diabetes. These findings suggest that BST may enhance psychosomatic well-being even in the context of chronic endocrine conditions, where stress is a critical contributing factor.

Support for Internally Displaced Persons (IDPs) from Conflict Zones.

Several publications from 2022-2023 describe the results of work with IDPs who experienced hostilities and were forced to leave their homes. In these groups, BST has proven to be an effective means of overcoming symptoms of depression and anxiety, reducing post-traumatic stress and normalising sleep. According to Venger and Ivanitska (2022), after a course of several sessions, IDPs significantly improved their quality of life and psychological well-being compared to the initial data. Another study (Gubska et al., 2023) concluded that the BST method is a universal tool that can be successfully used to correct a variety of psychosomatic and stress disorders - from functional gastrointestinal disorders to behavioural problems in children - that often accompany trauma.

This study emphasises the wide possibilities of adapting biosuggestive techniques to different clinical situations. While further rigorous research is needed, early results position BST as a promising and flexible approach to trauma-informed care in both acute and long-term settings.

Qualitative Feedback and Practitioner Observations

The qualitative feedback from practitioners and patients who participated in the first sessions of BST during the war is particularly revealing. For example, psychologists who conduct biosuggestive groups for the military note the unique property of the method to quickly establish trust even among an audience that has a sceptical attitude toward “talk” therapy. BST is attractive to soldiers because they are not required to talk in detail about their experiences or “open up” to others.

Soldiers can achieve relief by minimising the verbalisation of traumatic events, which reduces psychological discomfort from therapy. Many combatants have reported that, following BST sessions, they were able to sleep properly for the first time in months and experienced a reduction in phantom pain or muscular tension.

Civilian participants–those who survived shelling, occupation, or displacement–also shared similar impressions: even after the first group session, most reported improved mood and general well-being, and expressed a desire to continue the full course.

These subjective improvements are corroborated by objective clinical data. In particular, one study with the participation of residents of de-occupied settlements in the Kyiv region provides the following data:

- After five sessions of BST, the average level of anxiety (according to the HADS scale) decreased from 24 to 18 points.
- 68% of patients had a significant improvement in sleep quality, and 21% had a complete normalisation of sleep.
- According to a visual analogue scale, the intensity of chronic abdominal pain (a selected psychosomatic complaint) decreased from 6.67 ± 1.0 to 4.22 ± 1.48 after 4–5 sessions; some individuals even reported complete disappearance of pain during the relaxation phase.

Participants reported that during meditation, their attention seemed to be redirected from disturbing thoughts to the "therapeutic" images offered by the therapist's voice, which reduced the feeling of internal tension and visceral anxiety. These observations are consistent with the assumption that BST acts as a kind of "safety anchor" for the nervous system, which allows even severely traumatised individuals to find a point of calm within themselves.

It is also important that no complications or negative reactions have been recorded during the implementation of the method. On the contrary, therapists note an interesting phenomenon: conducting BST sessions has a positive effect on their own mental state. Working with a group in a trance mode, the psychologist personally reaches a state of calm, resonates with positive suggestions, and thus reduces the risk of professional burnout.

This “bidirectional” therapeutic effect–benefiting both client and therapist–contributes to the high professional acceptability of the method. Many practitioners have praised BST for its simplicity, conceptual clarity, and practical effectiveness, which has led to the rapid dissemination of the approach within the Ukrainian psychological community.

The above data, although preliminary, demonstrate the significant potential of Biosuggestive Therapy in overcoming psychological trauma and related psychosomatic disorders. However, these results should be interpreted with caution. Most of the studies had open designs and small samples, and did not include control groups, so the placebo effect or the influence of nonspecific factors cannot be ruled out.

Nevertheless, the coincidence of observations in different independent projects - from pain relief to sleep normalisation - suggests the presence of a real therapeutic effect. At this stage, BST has the status of an experimental technique with an accumulated collection of clinical cases and a series of pilot trials. To become an evidence-based practice, it is necessary to conduct more rigorous research projects, including:

- Randomised controlled trials,
- Long-term follow-up of patients after therapy, etc.
- And continued development of validated measurement protocols.

Discussion

The development of Biosuggestive Therapy fits into the broader context of finding new solutions to overcome trauma in extreme conditions. International experience shows that during wars and humanitarian crises, there is a need for short-term interventions that can be quickly scaled up to a large number of victims. Historically, many psychotherapeutic innovations have arisen in response to wartime challenges – from frontline crisis counselling in World War I, to modern group techniques for refugees.

For instance, in the 1990s, psychologists working with survivors of organised violence in East Africa developed Narrative Exposure Therapy (NET) as a concise PTSD treatment model. NET's creators, Dr. Maggie Schauer, Dr. Frank Neuner, and Dr. Thomas Elbert, designed the approach to be delivered in as few as 4–6 sessions, focusing on constructing a chronological narrative of the patient's life to contextualise traumatic memories (Schauer et al., 2011). Studies found that even this brief intervention was effective for war-affected refugee children – yielding significant symptom reduction immediately post-treatment, with benefits maintained at 9-month follow-up (Neuner et al., 2008). Notably, NET proved feasible even in refugee camp settings, which are comparable in many ways to the current realities in Ukraine (minimal infrastructure, high trauma exposure).

Another example is the integration of physical practices into trauma therapy. A recent paper by Swiss experts described group therapy with martial arts elements for refugee adolescents: combining karate-do with psychotherapeutic techniques increased concentration and emotional regulation in children who attended such classes (Montenegro et al., 2024). Although this approach needs further evaluation, preliminary feedback from teachers is positive. While still experimental, such an approach illustrates the creative blending of physical activity and group support to address trauma in extreme situations. Early feedback from that project has been positive, though formal evaluation is ongoing.

These cases illustrate how hybrid therapeutic models often emerge in extreme contexts–blending, for example, narrative and exposure elements (as in NET) or physical movement and group therapy (as in the karate-based intervention). In this context, BST is a logical and timely innovation: it synthesises suggestion and bodily relaxation in a group format, which allows for quick results without complicated equipment or lengthy preparatory stages. BST's design reflects practicality and cultural adaptability, much like the other war-born methods mentioned.

Despite the encouraging evidence, BST cannot yet be considered a fully proven method in terms of evidence-based medicine. The limitations of the available evidence base are obvious. First of all, there are no randomised controlled trials, so we do not know for sure whether the effect of BST is superior to placebo or other interventions. Secondly, the studies conducted in Ukraine were mostly descriptive in nature and had small samples, which reduces the statistical significance of the results. It cannot be ruled out that some part of the success of BST is due to nonspecific factors, such as therapist attention, group support, the effect of expectation of improvement, etc. Such factors are inherent in any psychotherapy, but without control groups, it is difficult to separate them from the specific effects of suggestion and touch.

In addition, there is still a lack of data on long-term results: does the relief achieved persist for several months to a year after the course is completed? This question requires special study through follow-up observation.

It is also worth considering the possibility of subjective bias in positive reviews - both therapists and patients, knowing about the novelty of the method, could unwittingly exaggerate its effects out of enthusiasm. To counteract such biases, future evaluations of BST should incorporate more objective outcome measures and study designs that include: independent blinded assessors (to evaluate patient symptoms without knowing if BST was administered), and comparison groups receiving either treatment-as-usual or an alternative intervention.

It is important to put the current lack of "hard" evidence in context. Many therapeutic methods go through an initial stage where anecdotal success outpaces scientific documentation, especially when developed under crisis conditions. In an ongoing war, it can be ethically acceptable to use interventions with limited empirical support, provided they appear safe and show practical effectiveness, because the alternative may be no treatment at all for people in acute distress. In Ukraine, BST was implemented widely because preliminary benefits seemed to outweigh potential risks, and there was an urgent need for accessible help. For many traumatised individuals during the war, the only real alternative would have been the absence of any psychological support.

The accumulated clinical experience to date – hundreds of patients treated across various regions of Ukraine – indicates that BST merits further development and scientific exploration. The method's apparent flexibility and ease of dissemination are attractive features in disaster mental health contexts. Now, the onus is on the professional community to rigorously test and refine BST so that its place in trauma therapy can be properly understood.

Ethical Considerations

From an ethical standpoint, the developers of Biosuggestive Therapy (BST) place particular emphasis on safety and voluntariness as fundamental principles of the method. As outlined in the methodology section, no client is subjected to any unwanted influence. All suggestions in BST are supportive and positively framed, with strict avoidance of any content that could conflict with the client's values or personal will.

Therapists practising BST undergo training not only in the technical aspects of the method but also in the ethics of suggestion. For instance, they are taught to formulate instructions in a non-categorical, soft form to leave space for the patient's autonomy (instead of the imperative "'You relax', constructions such as 'You can let yourself relax' are used, etc.) Thus, avoidance of manipulativeness is a conscious principle of the method.

The second critical ethical aspect is physical contact. In many cultures and situations, touch in psychotherapy is a sensitive issue. In BST, its use is strictly regulated:

- Therapists obtain written informed consent from the client prior to any use of touch.
- The client can opt out of the technique at any time or limit the form of contact (e.g., consenting only to a light touch on the shoulder).
- Touch is explicitly framed as a therapeutic tool, not a personal interaction, and this is clearly communicated beforehand.

Respect for personal boundaries is non-negotiable: if a client displays even the slightest sign of discomfort during a session, the tactile component is immediately discontinued. Fortunately, as clinical feedback indicates, the majority of BST participants respond positively to biosuggestive touch. Many describe the rhythmic tapping or gentle contact as something that "brings them back to reality" in a grounding and reassuring way, providing a felt sense of support and presence.

In groups where some of the participants are victims of violence, therapists sometimes immediately choose the format of imaginary touch in order to avoid triggering memories. Thus, flexibility and sensitivity in the application of the technique help to successfully avoid ethical problems.

Another ethical issue is the limits of applying BST. The authors consistently emphasise that this method does not claim universality and is not a panacea. There are cases where other types of therapy would be more appropriate. For example:

- Cognitive Behavioural Therapy (CBT) for addressing cognitive distortions,
- Pharmacotherapy for managing severe depression,
- or trauma-focused exposure therapies (e.g., EMDR) for in-depth trauma resolution.

BST has proven to be particularly effective as a first-line intervention in acute stress situations and as a stabilising tool. It often serves as a gateway that helps clients regain equilibrium, after which they may be referred for more in-depth psychotherapeutic work (e.g., psychoanalysis, trauma exposure therapy, or EMDR). From an ethical standpoint, the most responsible approach is integrative – embedding BST within a broader treatment plan, rather than allowing it to displace other necessary interventions.

It is also significant that BST is being disseminated through official, professional channels – via certified training programs conducted under the auspices of recognised professional organisations. This ensures that therapists using the method are part of a professional supervisory community and remain accountable for the quality of care provided.

In this way, BST is not introduced as a fringe or quasi-spiritual practice, but as a professionally grounded psychotherapeutic method, subject to ongoing monitoring, supervision, and training. This ethical infrastructure contributes to the credibility of BST as a legitimate and responsible therapeutic approach.

Future Directions and Scientific Collaboration

It should also be noted that at the current stage of BST development, the authors are open to cooperation with the scientific community to test and improve the method. The Institute of Biosuggestive Therapy is looking for opportunities for larger-scale studies, including partnerships with international researchers, to enhance methodological rigour and broaden the diversity of participant samples.

A substantial body of case reports and observational series has already been collected, which may serve as a foundation for generating hypotheses and research questions. The next logical step involves the organisation of controlled trials–for example, comparing BST with standard relaxation techniques or placebo conditions (such as pseudomeditation) in clinically similar populations.

Another interesting area is the neurophysiological study of the effect of BST (recording changes in heart rate variability, EEG during the session, etc.) to objectively confirm the activation of the parasympathetic system. The authors anticipate that findings from these studies will be available soon and look forward to the opportunity to validate the method on a wider scientific stage.

The invitation to collaborate is extended at international conferences and through publications; there is interest in collaborating with trauma therapists from other countries to conduct independent evaluations of the effectiveness of BST in different cultural contexts. Such an exchange would not only test the universality of the approach but also identify possible improvements or alternative explanations for its effectiveness.

Ultimately, the goal is not to promote BST as a “brand,” but rather to provide scientifically grounded support to individuals suffering from trauma. If future research confirms even part of the current clinical observations, BST could earn a place among recognised evidence-based practices, alongside established modalities.

Otherwise, negative or ambiguous results will also be a valuable contribution, allowing for adjustments or determining under what conditions the method works and under what conditions it does not. This scientific honesty and openness to verification are a cornerstone of the ethics of the method's authors.

Conclusions

Biosuggestive Therapy (BST) is a new integrative method of psychotherapy developed in response to the challenges of wartime in Ukraine. By combining the power of verbal suggestion and therapeutic touch, BST aims to quickly and gently alleviate the suffering of people who have experienced psychological trauma. Theoretically, the method is based on the classical principles of suggestive hypnotherapy, enriched by knowledge of the polyvagal regulation of the nervous system and the somatic nature of trauma.

Clinical practice and early studies show promising results. Various samples of patients have reported a reduction in anxiety, normalisation of sleep, reduction in the intensity of chronic pain, and improvement in mood and quality of life after a course of BST. The method has proven particularly well in working with military and civilian victims of combat operations, as well as in the correction of stress-related psychosomatic disorders.

At the same time, the current level of empirical evidence for BST must be regarded as preliminary. Due to the constraints of wartime, large-scale controlled studies have not yet been conducted, and existing data are primarily based on expert evaluations and open-label pilot research. Confirming the efficacy of BST will require continued efforts by the scientific community. The authors of the method clearly recognise these limitations and emphasise the need for further research, both in Ukraine and abroad.

Nowadays, Biosuggestive Therapy can be seen as a valuable complement to the range of trauma therapy methods, especially in times of crisis, when the speed and accessibility of care are crucial. The method may be integrated into comprehensive rehabilitation programs alongside other evidence-based approaches. Its application should always adhere to ethical standards, including informed consent, respect for patient autonomy, and careful consideration of medical indications and contraindications.

Preliminary experience offers hope that BST may benefit many trauma survivors, yet definitive conclusions about its effectiveness must be evidence-based. Therefore, we call upon researchers, clinicians, and organisations involved in trauma care to join efforts in further investigating BST. International collaboration will not only serve to validate the method, but – if its efficacy is confirmed – will allow it to be adapted and disseminated for the benefit of trauma-affected individuals worldwide.

Collaborative efforts to build an evidence base will contribute to the advancement of trauma recovery science and the improvement of treatment approaches, ultimately ensuring the best possible support for those in need.

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