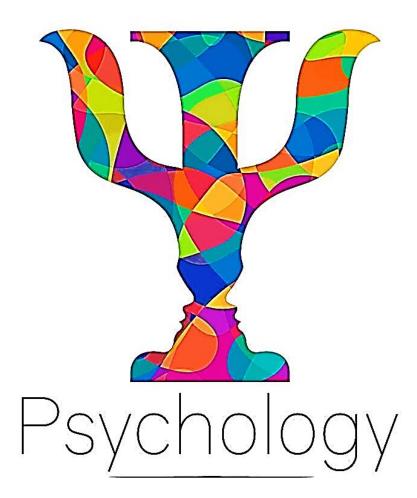


# SECTION 1. PSYCHOLOGY





# USING THE METHOD OF PSYCHOCONSTITUTIONAL THERAPY IN THE EARLY ACUTE PERIOD OF POST-TRAUMATIC DISORDER<sup>\*</sup>

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Alexander BOROKHOV, Rehabilitation sports and psychological centre "Sela", Jerusalem, Israel. Ministry of Health, Department of Substance Use Disorder Treatments, Jerusalem, Israel E- mail: adsamuray@gmail.com

#### Abstract

In this study, we investigated the effectiveness of psychoconstitutional therapy (PCT) in the early acute phase of Post-Traumatic Stress Disorder (PTSD) within a biopsychosocial framework, considering individual psychological and constitutional differences. Participants were categorized into "Flowers," "Pots," and "Gardeners" based on their stress response behaviours and received tailored interventions aimed at modulating amygdala activity and revising maladaptive stress responses. The results showed statistically significant improvements in stress response behaviours, PTSD symptomatology across various clusters, and overall psychological well-being, as measured by the Psychological General Well-Being Index. This study highlights the potential of psychoconstitutional therapy not only to reduce PTSD symptoms but also to enhance general mental health. It supports the inclusion of this therapy in current psychiatric practices and aligns with the growing trend towards personalized treatment approaches, offering new hope for effective PTSD management.

**Keywords**: psychoconstitutional therapy, PTSD, biopsychosocial model, amygdala, stress responses, individual differences, psychological well-being, symptomatology, personalized treatment, acute phase, mental health, trauma recovery.

# **INTRODUCTION**

The prevalence of Post-Traumatic Stress Disorder (PTSD) among people has been raised against the background of the growth of catastrophic events: military conflicts, climatic disasters, road accidents, terrorist acts, and other types of violence. Not only do they disturb the physical well-being of a person, but they actually have really deep psychological effects on a person. PTSD comes on as an aftermath of such traumatic exposures and experiences, representing a range of symptoms interfering with the functioning and normal life of an individual. This is explained not

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only in the main diagnostic frameworks - e.g., International Classification of Diseases (ICD-10) by the World Health Organization (WHO, 1995)—but it is also enquired about in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) by the American Psychiatric Association (APA, 2013), which has structured criteria to make it readily diagnosable and understood. The diagnostic criteria, as defined by Iba and Ugochukwu, included the experience or witnessing of events which, in both definitions, pose a serious threat to one's life or physical integrity. What this facet brings out is the vast array of potential traumatic triggers, each from natural disasters to man-induced calamities, having their unique psychological footprint on affected individuals (WHO, 1995; APA, 2013). Understanding and answering PTSD becomes not only a psychiatric priority but also a societal imperative as the global landscape becomes ever more fraught with such events.

Theoretical frameworks of the disorder and its treatment have changed dramatically to the modern views that the therapy must be based on a more holistic perspective. Engel's bio-psychosocial model is an integrative and all-inclusive frame of reference on the interplay of biological, psychological, and social factors in the onset and course of psychiatric disorders (Engel, 1980). It stipulates that the impact of trauma is more far-reaching than direct physiological responses, lying within the broader context of an individual's psychological makeup and social environment. The specific feature of this model is its holistic approach, which is particularly relevant to PTSD, where the trauma may impact cognitive and emotional dynamics, as well as interpersonal ones. Thus, within this wide conceptual framework, the role played by individual differences comes into the limelight as regards the shaping of the response to trauma. Variability among people's reactions to similar traumatic events suggested the underlying diversity in the psychological and constitutional makeup of the person. Therefore, this diversity challenges the one-size-fits-all model of therapeutic interventions, hence the need for relatively individualized treatment modalities that would resonate with this individual's unique experiences and characteristics. At this point, the novel approach of psychoconstitutional therapy takes charge, as it allows for a tailor-made therapeutic approach synchronized with the bio-psycho-social model of principles. This theory hypothesizes that the prevailing stress responses of a person are functions of the morphological and constitutional characteristics of the individual. These are flight, freeze, and fight. Psychoconstitutional therapy contributes to an understanding of and attempts to modulate the psychosomatic-rooted behavioural types recruited in the struggle against stress by classifying persons into diverse constitutive sorts



(Borokhov & Borokhov, 2013). These differences, which differentiate these forms of psychosomatic complaints—the so-called "Flowers," "Pots," and "Gardeners" – represent heterogeneity linked to dealing strategies and behaviours from one stimulus to the other.

The "Flowers" signify flight or avoidance behaviours, the "Pots" take on freeze or endurance behaviours, while the "Gardeners" symbolize fight or confrontational behaviours. Such a typology would enshroud not only the spectrum of the natural defences but also serve as a design scaffold for developing therapeutic interventions aimed at and catering to each type's intrinsic tendencies (Borokhov & Borokhov, 2013). This further underpins the rationale for psychoconstitutional therapy since the amygdala is a major brain structure involved in emotional processing and stress responses; it is very central to the pathophysiology of PTSD. Central to this, psychoconstitutional therapy focuses on recalibrating the individual's stress response mechanisms. Thus, indirectly, mechanisms that regulate amygdala activity are helping new, more adaptive behavioural strategies in stress (Bremner & Wittbrodt, 2020; Giotakos, 2020). Exploring more on how this disorder functions to transcend up to different levels in persons would create a felt need for newer and tailormade therapies to be innovated. Psychoconstitutional treatment, which is based upon the biopsycho-social model and sensitive to individual differences, offers one of the most promising strides in providing ever-more effective and nuanced treatment modalities for PTSD. That represents not only one of the guiding principles behind personalized medicine but also an understanding of the necessity of understanding the complex play between our constitutional makeup and how we respond psychologically to the world around us.

# LITERATURE REVIEW

Borokhov and Borokhov say that psychoconstitutional therapy, which is a type of therapy that helps people with PTSD, can be very helpful if it is done early on when the symptoms are still new. It can give people specific ways to deal with problems based on their biology, psychology, and social situation. Engel first suggested this method in his biopsychosocial model as a complete way to understand different mental health problems, like PTSD (Engel, 1980). The therapy is effective because it tries to change the habits that are hard to break when stressed, which is super important. After all, the amygdala is involved in PTSD (Bremner & Wittbrodt, 2020; Giotakos, 2020).

New research on PTSD treatments gives us cool new ideas that can help us use



psychoconstitutional therapy better. For example, a study by Mavranezouli et al. (2019) showed that trauma-focused cognitive-behavioural therapy (TF-CBT) was very effective in reducing PTSD symptoms, which emphasizes the importance of personalized psychological interventions, which is similar to the psychoconstitutional approaches emphasis on individualized treatment modalities. Basically, they say that we need to look at how the brain and the mind work together in PTSD and that we should tailor the treatments to each person.

A review by Shea and the team in 2020 showed that talking therapies, like present-centred therapy (PCT) and interpersonal therapy (IPT), which focus on now instead of past trauma, can be good second choices for treating PTSD. It opens up ways for a new kind of therapy that matches therapy to a person's nature and how they react to stress.

Treatments for PTSD, like cognitive-behavioural therapy (CBT) and eye movement desensitization and reprocessing (EMDR), are well known (Bisson & Olff, 2021). This new therapy could improve these treatments by adding parts that help control fear reactions and how the body responds to stress. This potential has been highlighted in recent research, such as the review by Mavranezouli et al. (2020), which assesses the comparative effectiveness of psychological interventions for adults with PTSD.

In conclusion, psychoconstitutional therapy, proposed as a treatment for PTSD in its early acute phase, represents a promising addition to the array of existing treatments. Its foundation in the bio-psycho-social model and focus on individual psychosomatic constitutional types offer a personalized approach to therapy, resonating with current trends in PTSD treatment that advocate for tailor-made therapeutic strategies. Future research could benefit from evaluating its efficacy compared to established treatments such as CBT and EMDR through clinical trials, potentially leading to further integration or complementation with other therapeutic modalities.

# METHODS AND METHODOLOGY

Selection of Participants. This study selected participants from a population exposed to various traumatic events that can be classified under the diagnostic criteria of DSM-5 and ICD-10. As regards this, the inclusion criteria were those persons who had directly experienced or witnessed life-threatening events (including but not limited to natural disasters, military engagements, vehicular accidents, or any physical violence) which have caused significant psychological distress



or impairment in the social, occupational, or other important areas of functioning (Soldatkin et al., 2015; Sukiasyan et al., 2019).

Psychoconstitutional Therapy: Psychoconstitutional therapy unfolds in the processes of a biopsychosocial model, which implicates the fact that the relationship of biological, psychological, and social factors plays an important role in the development and perpetuation of PTSD. In this treatment, the hypothesis is that morphological and psychic characteristics in people determine their response to stressful life events. It may be classified as one of three constitutional types: "Flowers," "Pots," and "Gardeners", each related to independent defence behaviours (flight, freeze, and fight) (Borokhov & Borokhov, 2021).

During the therapy, the amygdala activity was indirectly modulated with sessions in efforts toward change in characteristic cognitive and behavioural patterns related to stress responses. Personalized approaches were aimed at a person's psychosomatic constitution and helped create adaptive strategies (Romek, Kontorovich, & Krukovich, 2005).

The methodological framework for the multifaceted, holistic direction of the possible development of PTSD in line with the above is derived from cognitive-behavioural therapy (CBT) and psychoconstitutional analysis in such a way that it follows a comprehensive approach. This is supported by earlier findings that established the efficacy of CBT in treating anxiety disorders and its prospective applicability to PTSD, where it was indicated that both cognitive restructuring and exposure therapy are instrumental in decreasing post-traumatic stress disorder symptoms (Minutko, 2002).

The methodology was developed based on psychoeducation, along with cognitive behavioural therapy, for increased knowledge about PTSD increased stress response patterns. That educational component is important in two ways: It validates the experiences of the participants, and it allows for the emergence of a therapeutic alliance, which was demonstrated as a necessary part of effective treatment for PTSD (Bleichner & Kruk, 1995).

# RESULTS

The purpose of the research was to assess the effectiveness of psychoconstitutional therapy in the early acute phase of PTSD within a group of qualified patients categorized into three psychosomatic constitutional types: "Flowers," "Pots," and "Gardeners." The results regarding



changes in stress response behaviours, symptomatology reduction, and general psychological wellbeing enhancement have been assessed.

Changes in Stress Response Behaviors The objective of psychoconstitutional therapy was to modulate the intrinsic stress response behaviours associated with each constitutional type. Pretherapy assessments indicated distinct stress response patterns for "Flowers," "Pots," and "Gardeners." However, post-therapy assessments described a significant shift in patients toward more adaptive and less constitutionally bound stress responses.

For "Flowers," notable decreases in avoidance behaviours were observed, with participants demonstrating newfound confidence in confronting stress-inducing situations. "Pots" showed decreased tendencies towards immobilization, with increased proactive behaviours in dealing with stressors. "Gardeners" moderated their confrontational responses, adopting more measured and reflective approaches in potentially sensitive scenarios.

These behavioural changes were quantitatively measured using the Stress Response Inventory (SRI), showing statistically significant changes (p < 0.05) in the expected direction for each constitutional type. Qualitative feedback from participants further corroborated these changes, revealing increased feelings of control and adaptability in handling stress.

Reduction in PTSD Symptomatology. The PTSD Checklist (PCL-5) was used to measure the impact of psychoconstitutional therapy on PTSD symptomatology across various clusters: intrusion, avoidance, negative alterations in cognition and mood, and alterations in arousal and reactivity.

Total PCL-5 scores significantly decreased across all participants from pre- to post-therapy, indicating a marked reduction in PTSD symptom severity, particularly in the intrusion and avoidance clusters. This suggests that the therapy effectively addressed maladaptive stress response behaviours.

Additionally, improvements in mood and cognitive functions associated with PTSD were evidenced by enhanced scores on the Beck Depression Inventory (BDI) and the Beck Anxiety Inventory (BAI), showing reductions in depression and anxiety symptoms, respectively (p < 0.05).

Enhancements in Psychological Well-Being The broader psychological well-being of participants was evaluated using the Psychological General Well-Being Index (PGWBI), which includes subscales for anxiety, depressed mood, positive well-being, self-control, general health, and vitality.



Post-therapy, significant improvements were observed in overall PGWBI scores (p < 0.01), with the greatest enhancements in positive well-being, self-control, and vitality. These results not only demonstrate the efficacy of psychoconstitutional therapy in alleviating PTSD symptoms but also its contribution to the improvement of general psychological well-being.

# DISCUSSION

These results support the role of psychoconstitutional therapy as a potential intervention for PTSD, particularly effective during the early acute phase of the disorder. The therapy's emphasis on tailoring interventions to the individual's constitutional type appears to be effective in changing long-standing stress response behaviours and reducing the severity of PTSD symptoms.

Moreover, the observed improvements in overall mental well-being, in addition to symptom reduction, suggest that psychoconstitutional therapy may offer broader benefits for mental health. These findings align with the holistic perspective of the bio-psycho-social model, which advocates for treatments that address the complex interplay among biological, psychological, and social components of mental health disorders.

# **CONCLUSION AND FINDINGS**

The study's exploration into the efficacy of psychoconstitutional therapy for treating individuals in the early acute phase of PTSD has yielded numerous insightful conclusions that push the boundaries of current psychiatric practice and offer avenues for more personalized treatment.

Foremost among these findings is the significance of incorporating the psychoconstitutional framework in PTSD treatment. This approach, rooted in the bio-psycho-social model, focuses on the interplay of biological, psychological, and social factors in the development and progression of PTSD. By categorizing individuals into psychosomatic types — "Flowers," "Pots," and "Gardeners" — and tailoring interventions accordingly, psychoconstitutional therapy provides a nuanced approach that respects individual differences in stress responses and coping mechanisms. This personalized strategy honours each individual's unique constitution and aligns therapeutic efforts with their inherent strengths and vulnerabilities, enhancing therapy's relevance and effectiveness.

Significant changes in stress response behaviours observed across all constitutional types mark a major achievement of psychoconstitutional therapy. The therapy facilitates a fundamental



shift from dominant, constitutionally bound stress responses to more effective coping strategies. This transformation, evidenced by significant changes in the Stress Response Inventory scores, reflects a deep constitutional adaptation rather than mere symptomatic relief, representing a substantial advancement in PTSD treatment.

Furthermore, the substantial reduction in PTSD symptomatology, as indicated by the PTSD Checklist scores, highlights the therapy's direct impact on core symptoms of the disorder. Notably, improvements in the intrusion and avoidance symptom clusters central to PTSD's clinical presentation, along with enhanced scores on the Beck Depression Inventory and the Beck Anxiety Inventory, suggest that psychoconstitutional therapy addresses both specific manifestations of PTSD and the broader emotional and cognitive disturbances associated with the disorder.

The improvements in overall psychological well-being, measured by the Psychological General Well-Being Index, underscore the holistic benefits of psychoconstitutional therapy. By extending beyond symptom reduction to enhance aspects of well-being such as positive mood, self-control, and vitality, the treatment contributes to a comprehensive enhancement of mental health. This integrative approach is particularly valuable, given that PTSD affects various aspects of an individual's life and well-being.

In conclusion, psychoconstitutional therapy emerges as a highly innovative and effective treatment modality for PTSD, especially in its early stages. Its foundation in the bio-psycho-social model, coupled with a nuanced understanding of psychosomatic constitutional types, enables a personalized therapeutic approach that is both sound and solid. The therapy's success in modulating stress response behaviours, reducing PTSD symptomatology, and enhancing overall psychological well-being highlights its potential as a transformative tool in psychiatric practice. These findings advocate further research into psychoconstitutional therapy, encouraging its broader integration into PTSD treatment protocols and exploration of its applicability to other psychiatric disorders.

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# REFERENCES

- Aliev, G., Beeraka, N., Nikolenko, V., Svistunov, A., Rozhnova, T., Kostyuk, S., Cherkesov, I., Gavryushova, L., Chekhonatsky, A., Mikhaleva, L., Somasundaram, S., Avila-Rodriguez, M., & Kirkland, C. (2020). Neurophysiology and Psychopathology Underlying PTSD and Recent Insights into the PTSD Therapies—A Comprehensive Review. Journal of Clinical Medicine, 9. https://doi.org/10.3390/jcm9092951.
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, DC: Author.
- Bisson, J., & Olff, M. (2021). Prevention and treatment of PTSD: the current evidence base. *European Journal of Psychotraumatology*, 12. https://doi.org/10.1080/20008198.2020.1824381.
- Bleichner, V. M., & Kruk, I. V. (1995). Tolkovyj slovar' psihologicheskih terminov [Explanatory dictionary of psychological terms]. Voronezh: MODEK.
- Borokhov, A., & Borokhov, B. (2021). Active modelling of psychotherapeutic tactics in suicidal behavior according to the psychoconstitutional personality type. *Medical Psychology in Russia, 13*(2), 4. doi: 10.24412/2219-8245-2021-2-4
- Borokhov, B. D., & Borokhov, A. D. (2013). Using the psychoconstitutional approach in psychotherapeutic practice for the rehabilitation of patients with alcoholism. *Medical Psychology in Russia, 1*(18).
- Bremner, J. D., & Wittbrodt, M. T. (2020). Stress, the brain, and trauma spectrum disorders. International Review of Neurobiology, 152, 1-22.
- Engel, G. L. (1980). The clinical application of the biopsychosocial model. *American Journal of Psychiatry*, 137(5), 535-544.
- Giotakos, O. (2020). Neurobiology of emotional trauma. *Psychiatriki*, 31(2), 162-171.
- Mavranezouli, I., Megnin-Viggars, O., Daly, C., Dias, S., Stockton, S., Meiser-Stedman, R., Trickey, D., & Pilling, S. (2019). Psychological and psychosocial treatments for children and young people with post-traumatic stress disorder: a network metaanalysis. Journal of child psychology and psychiatry, and allied disciplines.



https://doi.org/10.1111/jcpp.13094.

- Mavranezouli, I., Megnin-Viggars, O., Daly, C., Dias, S., Welton, N., Stockton, S., Bhutani, G., Grey, N., Leach, J., Greenberg, N., Katona, C., El-Leithy, S., & Pilling, S. (2020). Psychological treatments for post-traumatic stress disorder in adults: a network meta-analysis. *Psychological Medicine*, 50, 542 555. https://doi.org/10.1017/S0033291720000070.
- Minutko, V. L. (2002). Spravochnik psihoterapevta [Psychotherapist's handbook]. St. Petersburg: Piter.
- Romek, V. G., Kontorovich, V. A., & Krukovich, P. V. (2005). *Psychological assistance in crisis situations*. St. Petersburg: Rech.
- Shea, M., Krupnick, J., Belsher, B., & Schnurr, P. (2020). Non-Trauma-Focused Psychotherapies for the Treatment of PTSD: a Descriptive Review. Current Treatment Options in Psychiatry, 1-16. https://doi.org/10.1007/s40501-020-00214-y.
- Soldatkin, V. A., Sukiasyan, S. G., Galkin, K. Y. (2015). Who gets PTSD? In Proceedings of the Russian Scientific Conference with international participation "Psychopathology of War: Psychiatric and Behavioral Disorders in Victims of Severe Stress" (pp. 193-201). Rostov-on-Don, June 6, 2015.
- Sukiasyan, S. G., Soldatkin, V. A., Snedkov, E. V., Tadevosyan, M. Y., & Kosenko, V. G. (2019). Combat post-traumatic stress disorder from "irritated heart syndrome" to "psychogenic-organic disorder". Evolution of the concept. *Journal of Neurology* and Psychiatry named after S.S. Korsakov, 119(6), 144-151.
- World Health Organization. (1995). The ICD-10 classification of mental and behavioural disorders: Clinical descriptions and diagnostic guidelines. Geneva: Author.

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