AFFECT TOLERANCE UNDER ACTIVATION: A COMPARATIVE REGULATORY MODEL OF TRAUMA-FOCUSED THERAPIES

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Abstract: *According to comparative efficacy studies and despite the numerous different trauma-focused psychotherapies currently in existence, the difference in efficacy between them is minimal. This paper argues that instead of focusing on comparing outcomes, a structural question is worth exploring. Namely, how exactly do these different treatments organize the emotional regulation work that patients must perform during trauma processing?*

This article develops a Comparative Regulatory Model, understanding diverse trauma-focused therapies as different variants of the same structural sequence, Activation → Dysregulation → Modulation → Integration, and establishing affect tolerance under activation as the central assessment variable.

This model does not classify the superiority or inferiority of various treatment modalities. Its analytical purpose is to establish a common theoretical language for comparing the structures of different trauma treatments.

Keywords*: Affect tolerance; Activation; Emotion regulation; Emotional Freedom Techniques; Post-traumatic stress disorder (PTSD); Trauma-focused therapies; Comparative model.*

Introduction

Today, when clinical professionals encounter a patient with post-traumatic stress disorder (PTSD), they can choose from a wide range of treatment options backed by solid evidence.

Treatments that currently have solid empirical support include: Prolonged Exposure Therapy, Cognitive Processing Therapy, Eye Movement Desensitization and Reprocessing (EMDR), somatic and regulation based therapies, as well as an expanding range of emotion-focused interventions, some of which have already been incorporated into clinical practice guidelines.

At the theoretical level, these treatments present clear differences from one another and, in some cases, are based on radically different theoretical assumptions. However, at the level of therapeutic outcomes, they show considerable consistency. Direct comparative studies of

established trauma treatments typically find only minimal or unstable differences (Benish et al., 2008; Wampold & Imel, 2015).

The field of psychotherapy has responded quite comprehensively to the question of whether treatments work, but falls far short of adequately answering the comparative question of what treatments actually do. The purpose of this article is to establish a conceptual framework for the latter.

The comparative regulatory model proposed in this article considers various trauma-focused treatments as different manifestations of a common structural sequence:

Activation → Dysregulation → Modulation → Integration

In this context, the central assessment variable of the model is affect tolerance under activation. This article defines it as follows:

The individual's capacity to maintain a regulated and continuous contact with trauma-related material when it is evoked, without losing behavioral stability or cognitive coherence.

Limitations of Comparisons Based on Therapeutic Outcomes

Exposure therapy, cognitive processing therapy and EMDR have obtained solid and substantial empirical support. At the same time, some newer treatment modalities, such as Emotional Freedom Techniques (EFT), have been accumulating supporting evidence through randomized trials and meta-analyses in recent years (Church et al., 2018; Stapleton et al., 2023).

However, when these empirically supported treatment modalities undergo direct head-to-head comparison, the efficacy differences between them tend to converge toward equivalence (Benish et al., 2008; Wampold & Imel, 2015). This result presents a somewhat uncomfortable situation: treatment outcomes tend to converge, but theoretical explanations are incompatible with one another.

We need an intermediate level of analysis, between grand theories and symptom scores that can concretely describe what kind of psychological work a treatment actually demands of the patient during its course.

Before formally introducing this model, it is essential to mention a representative process-level theoretical explanation. According to Emotional Processing Theory, fear structures must be activated and receive corrective information so that therapeutic change can occur (Foa & Kozak, 1986). This theory remains, to date, the most influential mechanistic explanation in the field of trauma treatment.

The model proposed in this article does not compete with it. Emotional processing theory explains how change occurs at the internal level during exposure therapy. Its objective is not to compare how different treatment modalities structure the relationship between activation and regulation.

In contrast, the comparative regulatory model proposed here operates at another level: the structural level. It poses the same question to each therapeutic modality. In relation to activation, where, when, and through which channel is regulation introduced?

Affect Tolerance Under Activation

Affect tolerance refers to the individual's capacity to maintain regulated contact with the internal experience of emotional activation, without resorting to avoidance, dissociation, behavioral discharge, or cognitive fragmentation.

This concept does not imply emotional repression or affective numbness. Tolerance does not require the individual to feel comfortable. What it demands is to maintain continuous psychological coherence under pressure.

This definition presupposes a fundamental premise which is that emotional activation in itself is not pathological. Pathology begins to emerge when the regulatory system is incapable of maintaining psychological organization while preserving contact with emotional activation (van der Kolk, 2014).

Traumatic memory networks are typically encoded in states of elevated autonomic hyperarousal. When these memories are reactivated, they tend to rapidly trigger escalating responses at physiological and emotional levels (American Psychiatric Association, 2013; Ehlers & Clark, 2000).

Therefore, the clinically relevant question is not whether emotion appears but whether, when it does, the individual can remain within a regulated bandwidth. From this perspective, affect tolerance under activation can be considered a regulatory threshold variable.

When tolerance capacity is sufficient, emotional activation can be processed and ultimately reorganized. When activation exceeds this capacity, defensive responses such as avoidance, dissociation, or emotional numbing begin to predominate. Although these responses may reduce distress in the short term, they interrupt the processing and integration of the traumatic memory (Foa & Kozak, 1986). Affect tolerance therefore helps explain, rather than merely describe, why posttraumatic symptoms persist over time.

Differentiation of Related Theoretical Concepts

This concept has similarities with several existing theoretical constructs, which must be distinguished.

1. Emotion Regulation

In the predominant research tradition, this refers to how individuals influence emotional states through various strategies regarding their onset, intensity, duration, and modes of expression (Gross, 1998).

In contrast, affect tolerance focuses on a more fundamental problem, namely whether the individual can sustain emotional activation for sufficient time to allow any regulatory strategy the opportunity to operate.

2. Distress Tolerance

A key concept proposed by Dialectical Behavior Therapy (DBT), which emphasizes the individual's capacity to endure states of distress without resorting to impulsive behaviors (Linehan, 1993).

Affect tolerance narrows this scope further, focusing specifically on trauma-related activation. In the trauma context, emotional escalation is more rapid and the threat to psychological integration is far greater than in states of general distress.

3. Window of Tolerance

Describes the physiological range of autonomic activation within which information processing can proceed normally (Siegel, 1999).

The comparative model proposed here adopts this same idea of "bandwidth," but employs it as an applicable evaluative variable for comparing different therapeutic modalities, beyond being a simple clinical metaphor within a particular therapeutic approach.

4. Psychological Flexibility

Emphasizes acting in accordance with one's own values while maintaining contact with present-moment experience (Hayes et al., 1999).

In contrast, when traumatic content is activated, affect tolerance under activation constitutes the prerequisite for psychological flexibility.

Physiological and Dynamic Bases

This construct possesses a well-defined physiological basis, which is fundamental to its theoretical validity. Trauma-related activation is typically accompanied by hyperresponsivity of the amygdala, impairment of inhibitory control in the medial prefrontal cortex (Shin et al., 2006) and damage to the contextualization function of the hippocampus, which further impairs the individual's ability to distinguish between past threat and present safety (Bremner, 2006).

Polyvagal Theory indicates that the state in which the autonomic nervous system finds itself determines, in itself, the type of information processing the organism is capable of undertaking (Porges, 2011). Consequently, affect tolerance under activation can be understood

as the individual's capacity to maintain their organism within a functional autonomic bandwidth when coming into contact with trauma-related material.

This does not mean a low level of activation but a regulated one. A further point deserves emphasis: affect tolerance is not fixed. It is a dynamic capacity that fluctuates with context. Any capacity susceptible to change based on context has, in principle, the potential to be expanded through interventions.

Four actionable components can be distinguished. Emotional endurance is the capacity to stay engaged with traumatic material for a sustained period without abruptly breaking contact. Autonomic stability shows itself in the absence of escalation toward panic or collapse. Behavioral containment means that impulsive avoidance and behavioral discharge do not take over. Cognitive accessibility, finally, refers to the individual remaining able to articulate the experience clearly even while emotionally activated.

These four components can be directly observed in clinical practice, and it is precisely for this reason that this construct can transcend treatment modalities with radically distinct procedures, serving a comparative analytical function.

PTSD in Regulatory Terms

Before applying the aforementioned regulatory sequence to the different therapeutic modalities, it is necessary to note that this construct, in fact, is already capable of explaining most of the structure of PTSD itself.

The core symptoms of PTSD include intrusive re-experiencing, avoidance, negative alterations in cognition and mood and altered arousal and reactivity (American Psychiatric Association, 2013).

These symptoms are not merely to be understood as a set of juxtaposed clinical manifestations, but rather may be considered a unified regulatory configuration. PTSD persists because it maintains a continuous self-reinforcing cycle. A narrow margin of tolerance means that activation becomes unbearable. The unbearable activation drives the individual toward avoidance or dissociation and each successful escape further reduces the tolerance range. Thus, the next activation becomes even more difficult to tolerate.

Consequently, regardless of the school to which they belong, trauma-focused treatments interrupt this cycle in practice at the same point. That is, they create the conditions for traumatic activation to occur and, at the same time, to be experienced safely within the tolerance bandwidth.

The Regulatory Sequence

The model proposed here organizes trauma processing into four sequential phases: Activation → Dysregulation → Modulation → Integration. Each phase can be defined as follows. Activation **r**efers to active or passive contact with trauma-related networks. Dysregulation refers to the state of instability that arises when activation exceeds the individual's tolerance bandwidth. Modulation comprises all regulatory mechanisms capable of maintaining activation within a functional range. Integration is the process by which, once traumatic activation has been sustained within the tolerance range, the traumatic material is reorganized.

This article does not postulate that these four phases can be clearly separated in actual therapy. Nor does it assume that each therapeutic session completely traverses all four phases. And certainly not that all treatment modalities depend on the same mechanism of action.

The approach of this text is more cautious and possesses greater pragmatic value. Namely, any trauma-focused treatment can be situated within this structural sequence by answering two questions: how does it manage activation and where does it position regulation?

The Activation Curve and the Tolerance Threshold

This sequence constantly unfolds around a central tension. Activation is a necessary condition for therapeutic change to occur. Without a sufficient degree of emotional engagement, traumatic material will remain isolated and cannot be modified (Foa & Kozak, 1986). Therefore, the relationship between activation and therapeutic benefit is best understood as a curvilinear relationship.

This perspective aligns with the classical Yerkes-Dodson Law (Yerkes & Dodson, 1908), but requires adding a crucial caveat in the field of trauma: given that the tolerance bandwidth in traumatized patients is notably reduced, this curve becomes much more pronounced. Affect tolerance regulates the entire system. As tolerance capacity expands, the optimal range of activation also expands.

Reading the Modalities Through the Model

Once the aforementioned construct and regulatory sequence have been established, the various consolidated trauma-focused treatments can be compared on the basis of five structural dimensions: the primary therapeutic entry point, the positioning of activation within the session, the nature and timing of modulation, the strategy for managing the regulatory threshold, and the mechanism through which integration is understood to occur.

Within this frame of reference, the field of trauma therapy presents, broadly speaking, four main structural configurations. This article does not consider any of them superior to the others. What truly differs between them is not the therapeutic objectives but the manner in which they organize the regulatory work.

Exposure-Based Therapies

Exposure-based therapies position activation as the central engine of the entire therapeutic process.

During treatment, the traumatic memory is reactivated in a planned and systematic manner, either through imaginal exposure or in vivo exposure, and is sustained for sufficient time to allow habituation or inhibitory learning to occur (Foa et al., 2007). In this process, modulation is not absent, but rather operates primarily in a more implicit manner.

Closely related therapeutic modalities, but with a greater cognitive focus, such as Cognitive Processing Therapy (CPT), channel traumatic activation primarily toward the verbal channel through oral expression and written processing. In this way, they manage to reduce the intensity of activation at the somatic level, while maintaining continuous contact with the traumatic memory and its meaning (Resick et al., 2017).

However, for those individuals whose tolerance bandwidth is inherently narrow, this therapeutic configuration proves extremely demanding. Dropout from exposure-based treatment is considerable, with roughly one patient in five discontinuing prematurely, although comparative analyses have not found exposure to lose more patients than other active trauma treatments (Hembree et al., 2003).

According to the model proposed in this article, rather than representing a failure of the therapeutic method itself, these situations reflect a mismatch between the intensity of activation and the tolerance capacity the patient possesses at that specific moment.

Reprocessing Approaches

Among reprocessing approaches, EMDR (Eye Movement Desensitization and Reprocessing) is perhaps the most representative modality. This type of therapy frames traumatic activation within a highly structured procedure, integrating modulation throughout the process from the outset (Shapiro, 2001). During trauma recollection, the patient simultaneously engages in dual attention tasks, which allows activation and modulation to alternate and coordinate. The standardized treatment phases continuously manage the patient's regulatory threshold and typically include a stabilization phase before formally entering high-intensity processing. From the perspective of our model, the most distinctive structural

characteristic of this modality is its coordination. That is, activation never substantially advances ahead of regulation.

Somatic and Regulation-Based Therapies

In contrast with exposure therapies, somatic and regulation-based approaches almost completely invert the regulatory sequence. As a general rule, they do not begin with high-intensity traumatic activation, but rather prioritize the building of regulatory capacities, which includes autonomic stabilization, interoceptive awareness and the introduction of traumatic material in small doses and in a pendulating manner (Ogden et al., 2006). Throughout the process, the regulatory threshold is monitored continuously.

Integration is understood primarily as the restoration of autonomic coherence and the recovery of regulatory flexibility. Within this framework, Polyvagal Theory provides much of the physiological foundation (Porges, 2011). Consequently, this therapeutic configuration presents two distinctive characteristics: it is conservative with activation and extremely generous with regulation.

Emotionally Focused Approaches

The term is used here in an analytical sense, designating treatments that deliberately engage emotional activation while embedding modulation within it (Greenberg, 2011), and it should not be confused with the branded couple therapy model of the same designation (Johnson, 2004).

During an Emotional Freedom Techniques (EFT) session, the patient maintains their attention and language focused on the disturbing traumatic material, usually through a structured narrative of the event. In parallel and following an established procedure, the patient engages in rhythmic tapping on specific body points, accompanying it with acceptance-oriented verbal expressions (Craig, 2011; Church et al., 2018).

According to the regulatory model presented here, in EFT, activation and regulation do not alternate nor occur sequentially, but rather are tightly coupled. Rhythmic body movements operate as a stabilizing attentional anchor.

For their part, the "setup statements" continuously link cognitive processing with emotional processing during activation. At the same time, the high procedural predictability further reduces the risk of uncontrolled emotional escalation. In this context, predictability not only provides safety but acts as a modulation mechanism in itself.

It is worth noting that the structural explanation proposed in this article does not depend on theories about acupoints or energy systems. It is founded entirely on directly observable

procedural characteristics. This is what allows EFT to be structurally compared within the same theoretical framework as exposure therapies, reprocessing approaches, and somatic therapies.

Previous studies indicate that patients undergoing EFT typically report a marked decrease in their subjective distress (Stapleton et al., 2023). According to our model, this phenomenon can be interpreted as an improvement in affect tolerance under activation, which does not necessarily imply mere distraction or emotional suppression. However, the present model does not purport to render a final verdict on this particular matter.

When analyzing these four categories of treatment together, both their similarities and differences become evident. Their fundamental common ground lies in the fact that their deep structure is identical. None of these therapies seeks to eradicate emotional activation. Their shared objective is to achieve integration through a level of activation that the patient is capable of tolerating within their bandwidth.

Typology of Regulatory Sequencing

Based on the comparative analysis, this article proposes a concise typology. Trauma-focused treatments can be grouped into four regulatory sequence configurations:

Sequential Activation-Dominant Configuration: Activation precedes regulation and assumes the primary role.

Coordinated Activation-Modulation Configuration: Activation and modulation remain two separable elements, and the procedure doses and times them against each other in structured cycles.

Modulation-Primed Configuration: Regulation precedes activation and delimits its scope.

Coupled Activation-Modulation Configuration: Activation and modulation merge within a single act, and neither is administered apart from the other.

The second and fourth configurations resemble each other closely, and the difference lies in how the two elements are joined. In the coordinated form they remain separable, and the procedure times one against the other, as when EMDR delivers dual attention in discrete sets and interposes verbal report between them. In the coupled form the joining is internal to the act, and at no moment does activation run without modulation, since the tapping accompanies the spoken narrative from beginning to end.

The intrinsic value of this typology does not consist in creating new nomenclature for therapies, but rather in translating the label of "therapeutic school" into a "regulatory configuration." And a structure is susceptible to being analyzed, matched with clinical needs, and rigorously evaluated through research.

Implications for Clinical Practice and Future Research

If the true difference between treatment modalities lies in how they structure regulation in relation to activation, then the criteria for treatment selection must go beyond mere diagnostic categories, taking the patient's current regulation threshold as a central consideration.

Those individuals with a broad tolerance range may be ideal candidates for interventions where direct activation predominates. In contrast, for patients who present with a narrow tolerance range, severe dissociative symptomatology and highly unstable activation levels, it is considerably more prudent, at least in the early stages of treatment, to opt for a modulation-primed configuration or a coupled activation-modulation configuration, reserving therapeutic work more predominantly oriented toward activation for a later stage, once the patient's tolerance bandwidth has gradually expanded.

The model proposed in this article also reinterprets adverse responses and premature dropout from treatment. In many cases, both phenomena can be understood as a sign that the intensity of activation during treatment exceeded the range of tolerance the patient was able to sustain at that moment.

This, in turn, directly exposes an important gap in current research. Today, the assessment of the patient's tolerance bandwidth depends almost entirely on informal judgments based on the therapist's clinical experience. The field as a whole still lacks a specific instrument capable of measuring affect tolerance under a state of activation. Consequently, the development of this type of measurement tool would constitute one of the most direct priorities for future research.

Implications for Research

In the research domain, the model proposed here implies that comparison between trauma treatments should shift, at least in part, from endpoint results toward the therapeutic process. If the various therapies are, in essence, different regulatory configurations, then studies could not only compare the degree of symptomatic improvement, but go further and evaluate within-session distress trajectories and treatment retention rates under different activation intensities.

Currently, numerous treatment protocols routinely collect the patient's Subjective Units of Distress (SUD) scores. While these metrics are relatively rudimentary, they provide a window of observation into the regulatory process mentioned above. Within this framework, the model formulates a series of falsifiable empirical predictions. For example, across different

therapeutic modalities, the patient's within-session tolerance trajectories should be capable of predicting the effects of final integration.

The model proposed in this work is equally relevant for brief interventions and single-session interventions, which have drawn increasing attention in recent years. According to our model, a brief intervention consists fundamentally of compressing and executing the complete regulatory sequence within the course of a single session: Activation → Risk of dysregulation → Modulation →The degree of integration achievable in a single session.

Consequently, for this type of treatment, its most reasonable claim to evidence should be, in the first place, a statement about the process. That is, whether during the session regulation successfully sustained activation, and whether the patient experienced a decrease in subjective distress while remaining within their tolerance range.

Therefore, if within-session regulatory data is used as the primary evidence for evaluating brief interventions, and long-term follow-up results are reserved as the standard for verifying whether integration has truly occurred, the evaluation methodology of these treatments will align much more faithfully with their own structural characteristics.

Limitations

It is indispensable to explicitly clarify the limitations of this model. First, it constitutes a conceptual framework and not a theory with empirical validation. The analysis presented regarding the various therapeutic modalities corresponds to an interpretive analysis of their procedures, and not to factual conclusions derived from clinical studies.

Second, the proposed four-phase regulatory sequence is only an abstraction of the actual therapeutic process. In practice, the multiple regulatory processes typically overlap and repeat recursively. Similarly, the four regulatory configurations described delineate dominant tendencies, not the immutable essences of each clinical approach.

Furthermore, the central construct proposed, affect tolerance under activation, currently lacks specific psychometric tools. Until such measurement instruments are developed, the evaluative function that this model aspires to fulfill will inevitably exceed its current measurement base.

In addition to this, the description of the different therapeutic schools has been conducted at the level of families or groupings (family-level). This level of analysis does not allow exhaustively reflecting the divergences between concrete treatment protocols, nor does it fully capture the influence of relational factors and contextual factors that permeate transversally across all therapeutic modalities (Wampold & Imel, 2015).

Finally, this model has been formulated with single-incident PTSD fundamentally in mind. It remains for future research to determine its degree of applicability to complex trauma and developmental trauma. For this patient population, it is highly likely that their baseline tolerance capacity was never properly established from the beginning. The addressing of these questions exceeds the limits set for this discussion.

Conclusion

Over the past four decades, comparative evaluation between trauma-focused treatments has orbited primarily around therapeutic outcomes. This article contends that, in complementary fashion, a new comparative dimension must be incorporated: the regulatory structure of the treatment**.**

If we ground ourselves in the sequence: Activation → Dysregulation → Modulation → Integration and establish affect tolerance under activation as the central evaluative variable, then those therapeutic modalities that at the theoretical level prove theoretically incommensurable acquire a substrate of comparability at the structural level.

All of them can be conceived as divergent solutions designed to address the same universal problem: how to enable a person to maintain contact with the trauma that once overwhelmed them, while simultaneously avoiding being crushed by it again, and sustaining this experience for sufficient time to allow genuine psychological change to crystallize.

The present document does not claim the discovery of any novel clinical phenomenon. Its essential contribution is to provide a new organizational framework. Historically, the different treatment paradigms have been described along parallel lines. This work constitutes an effort to forge a common analytic language.

Whether this language possesses genuine theoretical value remains an empirical question.

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