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Beyond Comfort: How Dynamic Safety Regulation Drives Psychotherapeutic Change – Transtheoretical Model

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Abstract
While safety is widely recognized as a foundational element of psychotherapy - supporting emotional regulation, exploration, and integration – a coherent, process-level model of how it is regulated throughout the therapeutic process remains underdeveloped. This article addresses that gap by offering a critical integration of developmental, relational, and neurobiological perspectives, and from this synthesis, proposes a transtheoretical approach that conceptualizes safety regulation as a core mechanism of therapeutic change. Safety regulation is not presented as a discrete phase or singular intervention but as a recursive, co-regulated process observable through distinct modes that adapt moment by moment to the client's shifting emotional, cognitive, and physiological states. Therapeutic change is understood to unfold not in linear stages, but through cycles of stability and activation, with prior regulatory strategies revisited as part of developmental progress. Within this view, safety is not the absence of distress, but the medium through which tolerable dissonance and emotional intensity are metabolized - fostering resilience. To make this approach actionable, the article identifies basic recurring patterns – modes - of safety regulation that cut across therapeutic approaches. These modes show how therapists adjust stance, pacing, and proximity to match the client's evolving regulatory needs and provide a procedural vocabulary to support moment-to-moment clinical decision-making. By enhancing conceptual understanding while offering practical guidance for therapeutic actions, this approach conceptualizes safety regulation as a dynamic process that scaffolds transformation.

Keywords Safety regulation · Therapeutic change · Attachment process · Transtheoretical model · Affect tolerance

Introduction

Efforts to understand therapeutic change have led to integrative frameworks identifying core mechanisms shared across modalities (Norcross & Goldfried, 2019). Models like the transtheoretical approach (Prochaska & DiClemente, 2019) and the contextual model (Wampold & Imel, 2015) emphasize common relational and psychological factors. Although widely recognized as essential for engagement, safety in psychotherapy is traditionally conceptualized as a preparatory condition rather than an ongoing, developmental-relational process.

Various models highlight its significance: attachment theory focuses on secure relationships (Mikulincer et al., 2013), trauma-informed approaches emphasize stabilization (Van der Kolk, 2015), and psychoanalytic, humanistic, and cognitive-behavioral traditions each contribute metaphors and techniques aimed at fostering safety. However, these frameworks seldom provide detailed procedural guidance on how therapists should dynamically regulate safety in response to moment-to-moment shifts in client states during therapy.

This gap has clinical consequences. Without a process-level model, therapists may overaccommodate, neglect essential interventions, or become rigid and controlling—leading to stagnation. Alternatively, they may challenge prematurely or belatedly, risking rupture, misattunement, or erosion of trust. Existing accounts seldom address how safety fluctuates, how it is co-regulated, or how therapists can monitor momentary shifts in affective cues, behavioral signals, and physiological responses to modulate safety at its evolving edge. While developmental (e.g., Bowlby, 1988) and neurobiological perspectives (e.g. Schore, 2019; Beebe & Lachmann, 2020) affirm safety's formative role in affect regulation, relational trust, and resilience capacities,

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yet they often describe this role in general or metaphorical terms. Safety is viewed as foundational because it enables the client to remain emotionally connected while engaging with novel or stressful experiences—conditions necessary for both developmental learning and therapeutic change. However, the concrete mechanisms through which safety is maintained or disrupted -such as pacing (how quickly material is introduced), distance regulation (how interpersonal closeness is managed), and affective tolerance (how much emotional intensity can be processed without disintegration) - remain largely under-theorized. These dynamics are central because they determine whether the client stays engaged and can process and integrate therapeutic material or becomes overwhelmed and disconnected. By adjusting pacing, distance, and emotional intensity, safety becomes an active process that helps clients foster resilience capacities and support therapeutic change.

Recent works by Podolan and Gelo (2023, 2024) introduce the concept of a client's *safety zone* - a dynamically co-regulated range within which emotional arousal remains tolerable and relational connection can be sustained. The safety zone encompasses shifting thresholds of physiological (e.g., heart rate, breath patterns), emotional (e.g., affect intensity, narrative content), and interpersonal tolerance (e.g., eye contact, vocal tone), offering a practical framework for understanding how clients can stay engaged with challenging material without becoming overwhelmed. This construct anchors the model developed in this article and provides a procedural lens for attuning therapeutic pacing, proximity, and novelty in response to the client's evolving state. It conceptualizes safety as inherently recursive and co-regulated - emerging through continuous mutual adjustment - aligning with contemporary models of affect regulation (Fosha, 2021), polyvagal theory (Porges, 2022), and developmental scaffolding (Xi & Lantolf, 2021), all of which highlight change as occurring near the threshold of manageable experience.

This article builds on that foundation and proposes a transtheoretical model of safety regulation as a central mechanism of therapeutic change, articulated through recursive modes. Each mode reflects a distinct way therapists adapt to the client's evolving capacity for emotional connection. The article examines how these modes appear across major traditions, reviews their empirical grounding, and explores their utility for clinical reasoning and supervision. The aim is to propose that safety is not merely a condition for change - but a core medium through which change becomes possible for many clients. Importantly, the form that safety takes is not uniform across clients. While some benefit from emotional closeness, harmony, and verbal affirmation, others may experience safety through distance, neutrality, or even regulated tension and conflict (Mallinckrodt et al., 2015; Gazzillo et al., 2024). The model accommodates this diversity by focusing not on predefined therapist behaviors, but on how safety is co-constructed in the evolving intersubjective field of conscious and unconscious processes. It emphasizes variability in how clients experience safety and change and supports therapists - across modalities - in flexibly adjusting their stance to meet differing relational needs.

Safety in Psychotherapy: Current Perspectives and Gaps

Safety is widely recognized as a cornerstone of therapeutic change, yet its definition and practical regulation remain fragmented across theoretical traditions. Bowlby (1973) distinguished between safety—as objective protection from harm - and security - the subjective experience of being free from fear or anxiety, rooted in stable internalized representations of care and regulation. His ideas of the safe haven and secure base (Ainsworth, 2010; Bowlby, 1973, 1988) reflect this distinction. Recent clinical literature increasingly uses the term safety to encompass both meanings (Fonagy & Allison, 2014; Porges, 2022; Van der Kolk, 2015). This paper adopts the broader usage, treating safety as a dynamic, co-regulated process involving both external conditions and internal experiences.

While safety is widely acknowledged as a foundation for exploration, affective processing, and relational development, certain models conceptualize it more as a prerequisite to be established rather than as a dynamic, procedural process that adapts to clients' shifting needs. Psychoanalytic approaches (e.g., Winnicott, 1960; Bion, 1962), often emphasize safety as containment and holding, processing unmanageable emotions through attuned presence, with some highlighting relational dynamics. Many cognitive-behavioral models (Beck et al., 2024; Ehlers & Clark, 2000) provide structured distress management, including cognitive restructuring, trauma-focused pacing, grounding, and exposure, while certain adaptations engage more dynamic regulation. Humanistic and existential traditions (Rogers, 1957; Yalom, 1980) typically emphasize authentic presence and connection, although procedural strategies vary. Overall, while these diverse traditions offer valuable perspectives, they often lack clearer frameworks for dynamically modulating safety to meet clients' evolving needs.

Attachment theory (Bowlby, 1988) provided a developmental framework for safety regulation. In infancy, safety is established through proximity-seeking behaviors and caregivers' modulation of distress. Developmentally, from infancy through adulthood, the balance between co-regulation and self-regulation shapes affect integration and relational trust. However, research has shown that patterns that

may appear subjectively safe -such as excessive reliance on others (preoccupied attachment) or avoidance of relational support (avoidant attachment)—are in fact markers of maladaptive regulation associated with increased risk for psychopathology (Messina et al., 2023; Springstein et al., 2023; Messina et al. 2024). While attachment theory clarifies these dynamics, it offers limited guidance on how therapists dynamically co-regulate safety within real-time therapeutic interactions.

Neuroscientific and evolutionary models (Panksepp & Biven, 2012; Gilbert, 2024) describe safety as emerging from caregiving, play, and affiliative systems countering fear and threat responses. However, they focus more on biological underpinnings than on therapists' real-time adjustments. Polyvagal theory (Porges, 2022) highlights the vagus nerve's role in social engagement, while Schore (2019) and Fosha (2021) emphasize maintaining clients within a window of affect tolerance where emotion and cognition can integrate. Yet, these models often treat safety as generalized, lacking detailed frameworks for dynamic safety regulation.

Control-Mastery Theory presents safety as crucial for disconfirming pathogenic beliefs. Silberschatz (2017) and Gazzillo et al. (2019, 2024) described clients' use of "testing" behaviors and therapist responsiveness to adaptive goal pursuit. Fiorenza et al. (2023) elaborated on how safety enables clients to pursue adaptive goals, while Gazzillo et al. (2019) detailed the types of pathogenic beliefs and the testing process. However, even these works provide limited guidance on how therapists dynamically adjust proximity, pacing, or tone to sustain safety in session.

While safety is consistently recognized as essential for therapeutic change, most models emphasize safety's importance but rarely detail its dynamic, real-time modulation. This leaves clinicians relying on intuition rather than on a structured framework and a shared understanding of safety as an evolving process.

Moreover, safety is not context-neutral. Its experience is shaped by social hierarchies, cultural norms, and collective trauma. Issues of race, class, and power influence how safety is negotiated and co-constructed in therapy. Recent work by Podolan and Gelo (2024) addresses these complexities with the concept of a modifiable *safety zone*—a dynamically co-regulated range where stability and novelty coexist, responsive to shifts in pacing and proximity. However, a shared transtheoretical language for understanding how safety is experienced and regulated across contexts remains underdeveloped.

Conceptual Foundation – The Client's Safety Zone

Given the need to explain how safety is regulated over time within the therapeutic process, the concept of the client's *safety zone* serves as a transtheoretical framework for articulating this dynamic and clinically significant phenomenon. The *safety zone* refers to a dynamically modulated range of biopsychosocial functioning in which the client can remain engaged without becoming overwhelmed or withdrawn (Podolan & Gelo, 2024). Rather than a static condition, it is fluid-shaped through ongoing co-regulation between client and therapist, and responsive to timing, context, and therapeutic tasks. Crucially, the safety zone is not experienced uniformly across clients. Some individuals feel safest in emotionally expressive, collaborative relationships; others may need calm neutrality, structured boundaries, or even relational tension to remain engaged. The model is idiographic in intent: it does not define safety as a fixed state but as a process that must be dynamically co-regulated in ways that respect each client's unique developmental, relational, and cultural needs.

This concept builds upon, but is distinct from Bowlby's (1988) secure base, Siegel's (2012) window of affect tolerance, or Porges' (2022) model of neurophysiological safety. While these theories highlight key mechanisms—attachment, regulation, containment—none fully address how therapists flexibly calibrate safety in real time to support engagement, distress, challenge, or repair. What distinguishes the safety zone is its emphasis on regulation as a process. Rather than treating safety as something to be "established" before deeper work begins, this model proposes that safety may function as an ongoing medium through which therapeutic change occurs. Conceptually, the safety zone can be viewed as a semi-permeable membrane - selectively filtering and regulating relational and emotional input in ways that expand or tighten according to the client's shifting capacity for proximity, novelty, and affect. It is hypothesized that this zone must be continually co-created, recalibrated, or re-stabilized as therapeutic demands evolve. While this framing aligns with contemporary views of regulation and co-construction, it remains a theoretical proposition in need of further empirical exploration.

The safety zone includes behavioral, emotional, physiological, and relational dimensions that interact from moment to moment. It reflects the client's capacity to stay regulated under therapeutic demands and the therapist's role in modulating them - through pacing, tone, rhythm, and focus - to sustain engagement. Crucially, safety must not be confused with comfort. While the comfort zone protects against activation, the safety zone enables clients to engage in manageable distress— supporting the enhancement of

resilience functioning by integrating discomfort within the co-regulated therapeutic connection. This conceptualization aligns with models of affect tolerance and adaptive capacity, which suggest that resilience emerges not from avoiding activation, but from experiencing and metabolizing distress within a co-regulated therapeutic relationship (Fosha, 2021; Schore, 2019).

The mode replaces generic advice like "go slow" or "create safety" with a process-sensitive lens for deciding when to stabilize, explore, or challenge. This is especially useful in complex presentations - trauma, severe dysregulation, or rigid defenses - where clients fluctuate between openness and withdrawal. The safety zone framework supports clinical reasoning, offering a shared vocabulary for the rhythms of regulation and enhancing attunement and flexibility across therapeutic modalities. While it opens promising avenues for future research—such as studying how distinct patterns of safety modulation influence alliance, affect integration, and long-term outcomes — its current contribution lies primarily in guiding therapeutic processes and decision-making. Further methodological development is needed before the model can be applied consistently in empirical research.

Mode-Based Regulation of the Client's Safety Zone

Psychotherapeutic safety is not static or uniformly maintained over time. Instead, it is regulated through distinct interaction patterns that adjust the client's safety zone in response to clinical demands. These patterns support stability, widen the affective range, permit risk, and facilitate integration. Each can be understood as a regulatory mode—an implicit structure therapists use to meet shifting needs without relying on staged models or linear progressions. The relative importance of each mode may vary across clients. For example, some individuals with narcissistic or rigid defensive patterns may benefit from sustained holding and attunement, while others with more open or exploratory capacities may profit more from deeper engagement, novelty, or calibrated disruptions. Each mode functions as a directional cue—a kind of compass bearing—helping therapists orient to the client's evolving needs while staying within the zone where change remains possible.

This transtheoretical lens renders safety regulation observable and clinically actionable, fostering epistemic trust through attuned, dynamic interaction. By identifying which regulatory task is active - whether containing, challenging, reattuning, or consolidating—clinicians can better adjust interventions, monitor movement, and support change. This process of moment-to-moment adjustment reflects what Fonagy and Allison (2014) describe as the therapist's role in supporting the client's emerging capacity for self-regulation through consistent mentalization, attuned responsiveness, and the fostering of epistemic trust. The safety zone serves as both a diagnostic frame and a therapeutic mechanism, showing how safety is constructed, disrupted, and restored over time.

Therapist as Safe Ground for Transformation of Client's Safety Zone

The safety of the therapist forms the foundation for all modes of safety regulation. Far from being a preparatory state, it operates continuously - shaping the therapist's responses and enabling safe engagement across all phases of therapy. This mode refers to the therapist's capacity for emotional self-regulation, reflective presence, and ethical clarity—acting as an emotional anchor that stabilizes the relational field. It requires a background that fosters affect tolerance, secure or earned-secure attachment, and reflective functioning—without which the therapist's presence may become reactive or dysregulating. Therapists under external threat, chronic stress, unresolved trauma, or insufficient training or supervision may experience diminished regulatory bandwidth (Rubino et al., 2000; Degnan et al., 2016), narrowing the client's safety zone or disrupting attunement (Mikulincer et al., 2013). Emotional grounding, by contrast, enables the therapist to tolerate ambiguity, hold projections, and respond with clarity and flexibility (Kottler, 2022; Wampold & Imel, 2015). It is not a backdrop but an active condition shaping therapeutic possibilities - one that enables all subsequent forms of safety co-regulation to function in context.

A compelling example of this grounding role comes from psychoanalyst Wilfred Bion. Bion described the therapist's task as containing and transforming the emotional turbulence that clients cannot yet process or symbolize (Bion, 1962). When a client projects raw, unprocessed distress into the relationship, the therapist may feel an urge to fix, retreat, or explain. Instead, containment involves fully receiving that emotional communication - not just holding it, but absorbing, metabolizing, and silently making sense of it. This internal process enhances the therapist's capacity to remain emotionally present, reducing the likelihood of conscious or unconscious defensiveness. It is this quiet resilient act of reverie and emotional digestion that creates the safety clients need to begin processing experience for themselves. In this way, the therapist's capacity for containment and reverie establishes the foundational layer of the client's safety zone—enabling survival and stability as a basis for all further therapeutic work.

Providing a Holding Frame: Attending to the Client's Safety Zone

Clients start detecting safety through subtle nonverbal cues – the therapist's website, office, tone of voice, facial affect, and gestures of accessibility - which convey presence and coherence (Porges, 2022; Soma et al., 2023) These cues initiate the process of co-regulating safety through environmental stability and relational consistency. Attending to the client's safety zone refers to establishing a foundational regulatory frame in which safety can be co-constructed. This includes the collaborative setting of therapeutic boundaries - such as the periodicity of sessions, fee agreements, and overall structure of therapy - that reflect both clinical needs and the client's individuality. It also involves supporting the client's ordinary variability (Gelo & Salvatore, 2016**).** Within this frame, the therapist respects protective defenses that help maintain the client's safety zone. The regulatory frame also fosters restoration by offering relational and environmental holding that facilitates recovery from past emotional wounds. A stable yet responsive relational environment creates synchrony with the client's rhythms, fostering a sense of being recognized, understood, and valued.

Drawing on attachment theory (Bowlby, 1988), interpersonal neurobiology (Schore, 2019), affective neuroscience (Panksepp & Biven, 2012), and infant research (Beebe & Lachmann, 2020), attending involves sustained co-regulation to support containment, predictability, and relational trust. In therapy, this translates into a holding stance - offering consistency without overwhelming, while remaining affectively engaged. Such regulated safety fosters a sense of belonging that is both reparative and evolutionarily adaptive (Wampold, 2015). This may be strengthened by early agreement on goals that align with the client's readiness and meaning-making process (Flückiger et al., 2018).

Therapists must attend to the safety zone by monitoring signs of dysregulation—posture shifts, dissociation, or withdrawal. When these arise, the therapist should pause, reduce verbal load, and offer grounding responses. Naming subtle physiological cues - "I see your breath quickening; shall we slow down?" - can support co-regulation when delivered in a steady, anchored tone that reflects containment rather than emotional tracking. Simple cues - "We are not rushing" - reduce ambiguity when offered in a warm, predictable cadence. These moments align with polyvagal strategies that link safety to nervous system regulation (Porges, 2022).

Clients with developmental trauma often present fragmented safety zones. Here, the therapist becomes a steadying presence, regulating arousal without seeking insight prematurely. Supportive interventions - such as empathic reflection, affirmation, and emotional mirroring- reinforce containment and help form a secure bond. Interpretations should wait until the client shows signs of stability. When ruptures occur, even subtle ones, they require prompt repair. A simple return to safety - "I may have missed something" - can be more powerful than perfect attunement (Safran & Kraus, 2014).

Attending to the safety zone is not a fixed stance but a regulatory rhythm that supports external regulation until self-regulation becomes more viable. Through this consistent stance, the therapist helps re-establish conditions for flexibility and resilience. Such environmental and relational consistency is illustrated by Kykyri et al. (2017), who describe how a therapist's use of nonverbal rituals - such as a fixed seating arrangement and predictable greeting tone - helped trauma clients physiologically settle at the beginning of sessions. This rhythm of predictable cues anchors early co-regulation and reinforces the client's felt sense of safety in the therapeutic environment. Over time, clients begin to internalize this holding experience—laying the groundwork for deeper change. This aligns with Fosha's (2021) assertion that transformational change becomes possible when dysregulated affect states are processed within an attuned relational context, allowing for the internalization of co-regulatory experiences.

Attuning to the Client's Safety Zone: Calibrating Connection in Real Time

Whereas attending provides a stable relational frame, attunement refers to the moment-to-moment modulation of tone, pacing, proximity, and focus in response to the client's shifting regulatory capacity, trauma history, and nervous system flexibility — marking a shift toward more dynamic and interactive forms of co-regulation. Rather than applying interventions uniformly, therapists adjust their delivery based on subtle cues—modulating voice, rhythm, or emotional intensity to match the client's immediate needs. Attunement includes pacing-focused or exploratory interventionFsels that titrate intensity without destabilizing the client. A pause, an averted gaze, or a stiffening body may call for a softening tone or slowing speech. Attunement requires humility, emotional flexibility, and openness to implicit, explicit, and unconscious feedback. This involves recognizing and calibrating around the client's defenses as they surface.

While attending, holding, and containing the client's safety zone provides a safe environment, personal attunement enables the therapist to become its attuned co-regulator. This co-regulatory mode draws on dynamic systems theory (Gelo & Salvatore, 2016), the window of affect tolerance (Fosha, 2021; Siegel, 2012), and experiential pacing models (Greenberg, 2017) and allows the therapist to

prevent overstimulation or disengagement while supporting change.

Session rhythm is central to maintaining safety. Shifts between affect and cognition, the use of silence, and pacing help the therapist match the client's changing capacity. In this mode of safety regulation, proximity must be calibrated: clients with unmet early attachment needs may require more sustained closeness, while others may need more protective space. The aim is not to avoid difficulty but to create a rhythm of contact and rest that supports emotional processing. Even accurate interventions can feel intrusive without proper calibration; with it, challenging material becomes tolerable. This principle is exemplified in a moment described by Greenberg (2017), where a client physically withdraws as sadness emerges. The therapist notices the shift, softens their tone, and says, "That got heavy - shall we pause or stay with it?" Without such modulation, even a helpful insight might have triggered shutdown or disengagement. Instead, this adjustment allows emotional depth to be accessed safely, maintaining therapeutic safety while inviting affective engagement. Still, sensitivity not only to specific moments but also to cultural norms and attachment patterns is essential in this regulation mode. Some clients feel safer with implicit connection; others need verbal affirmation and visible steadiness. Mallinckrodt (2015) emphasizes adjusting emotional proximity and pacing to align with relational expectations: avoidant clients may require more space and indirect rhythm, while anxious clients benefit from closer, affirming presence. Mis-attunements often arise not from technique, but from overlooking these foundational dynamics.

Attunement and calibration do not mean avoiding discomfort - they involve knowing when and how far to stretch. This may include gently noticing avoidance, inviting here-and-now awareness, or naming subtle shifts in affect or posture. The difference between helpful challenge and rupture often lies in timing, tone, and relational groundwork. At times, the therapist's voice may need to firm up to contain avoidance, or soften to soothe distress. One example of this principle is found in solution-focused, tempo-sensitive trauma approaches (Dellucci & Vojtova, 2012), which illustrate graded engagement - modulating intensity from grounding to symbolic work based on trauma severity and client readiness.

Ultimately, by staying attuned to a moving target, the therapist keeps the client's safety zone flexible rather than rigid, allowing for both containment and exploration. In this way, attunement fosters the client's capacity for exploration and engagement with new emotional experiences, supported by adaptive regulation and mutual responsiveness. The therapist's consistent predictability and dynamic responsiveness also foster trust, preparing clients for deeper work. As engagement feels stable and co-regulated, clients may begin to lean into emotional risk or become open to tentative interpretation - clear signals that safety is not static, but an evolving platform for change.

Facilitating Contact with Novelty: Stretching the Safety Zone Without Overwhelm

This mode of safety regulation focuses on the co-regulated movement toward the edges of the safety zone—what Schore (2019) or Fosha (2021) calls the "edges" of affect tolerance — where co-regulation involves graded contact with novelty or emotional dissonance. Unlike attending, which stabilizes the frame, or attuning, which modulates within it, this mode supports clients in safely encountering danger and novelty - less-traveled emotional, relational, or narrative territories - without losing control or coherence. Safety here is flexible and co-regulated at the current edge of the client's safety zone. This edge marks the limit of what feels tolerable now but lies beneath the broader developmental threshold - the limit of what could become tolerable with support (Leiman & Stiles, 2001). The therapist and client work at this edge to gradually expand the safety zone toward that threshold, fostering more adaptive patterns.

Safety regulation in this mode involves fine-tuned modulation of pacing, proximity, and emotional intensity. Novelty—such as unfamiliar affects, restructured self-narratives, or new relational stances - is introduced through mild dissonance that stretches but does not overwhelm. This includes work-enhancing, pacing-focused, or exploratory interventions that titrate intensity without destabilizing the client, allowing safe engagement with new experiences. These moments invite meaning expansion, tentative reappraisal, or symbolic revision—facilitating the integration of unfamiliar material within the expanding safety zone. In this context, a warm, steady tone and gentle rhythm help anchor the client as they explore new internal terrain (Kykyri et al., 2017; Soma et al., 2023). In this mode, the therapist's modulation of tone, rhythm, and timing should be attuned to the client's attachment patterns and developmental history. For instance, when working with clients who exhibit over-reliance on relational closeness, the therapist might employ a slightly more neutral tone, and a steadier rhythm, and introduce brief pauses to gently encourage autonomy. Conversely, with clients who tend to avoid closeness, a warmer tone, slower pacing, and extended moments of empathetic silence can help foster a sense of safety and encourage engagement. Therapists also help consolidate motivation and internal resources - validating early gains, identifying strengths, and reinforcing preexisting strategies (Flückiger et al., 2012). These supportive actions strengthen the client's foundation for approaching deeper, often unreflected,

and emotionally loaded patterns. Access to these patterns must remain gradual and metabolizable to avoid overwhelming the client. A therapist informed by Fosha (2021) or Soma et al. (2020) might say, "What if we imagined a different possibility here?"—while carefully tracking the client's facial expression and breath. This kind of gentle invitation to reframe the experience introduces dissonance without overwhelming, allowing affective integration near the edge of the safety zone. Through this process, the client's capacity for risk-taking expands, supporting resilience and enabling the navigation of novelty while maintaining coherence. However, near this edge of the client's safety zone, expressive or restructuring interventions require sensitivity, as premature novelty can interrupt the developing exploration and trigger withdrawal.

Attachment patterns shape how novelty is approached. Avoidant clients often keep safety zones narrow to avoid vulnerability; they benefit from indirect, low-intensity exploration and consistent pacing (Mallinckrodt et al., 2015). Preoccupied clients may rush toward novelty impulsively and need containment to prevent flooding. In both cases, verbal and nonverbal co-regulation—through gaze, voice, breath, and posture—creates a rhythm in which dissonance remains tolerable (Crittenden, 2006). Working near the edge of the safety zone in this way fosters resilience and integration, expanding the client's capacity for complexity and change.

Disrupting Within the Safety Zone: Introducing Dissonance for Structural Reorganization

This mode marks a shift from carefully expanding what is already tolerable to deliberately engaging material just beyond the client's current regulatory capacity - using co-regulation to support brief dysregulation that may prompt reorganization. Here, previously protective defenses may soften, as new adaptive patterns emerge within safe, co-regulated disruption. For example, when the client suddenly changes the subject to avoid feeling upset, the therapist gently points this out and invites the client to stay with, observe, and explore the feelings that arise. While the previous mode works at the edge of the safety zone - stretching its boundaries while preserving emotional coherence - this mode introduces brief, co-regulated disruptions that exceed those boundaries. The aim is not to provoke rupture, but to trigger reorganization by destabilizing rigid, maladaptive patterns within a contained and collaborative frame.

For some clients, tolerable destabilization may involve direct emotional engagement, new affective experiences, or challenges to longstanding self-narratives. For others, it may take the form of therapeutic conflict, boundary tension, or relational distance that evokes defensive responses. What constitutes a disruption - and what keeps it tolerable - varies widely: while one client may find emotional closeness disorganizing and require structured detachment, another may find challenge destabilizing unless accompanied by empathic containment. In all cases, safety is not absent during disruption but co-regulated in tension with novelty or dissonance. For instance, consistent with Fonagy and Allison's (2014) emphasis on epistemic trust, a therapist might say, "I sense you pulling away—are we back in a familiar place?" rather than offering immediate reassurance. This brief, attuned mismatch destabilizes habitual relational expectations and invites reflection without rupture. Such momentary mismatches exemplify the disrupting mode within the safety regulation model, enabling therapists to track how safety is experienced and adjust their stance to keep the client within a developmental threshold - where destabilization fosters integration rather than withdrawal. Disruption involves subtle yet intentional mismatches: challenging fixed meanings, activating avoided affects, or momentarily withdrawing expected reinforcement (Stiles et al., 2016). The therapist operates within the developmental threshold, or therapeutic zone of proximal development (Leiman & Stiles, 2001)—a zone where experiences are not yet tolerable independently but become processable through active co-regulation. Unlike exploratory engagement, which supports safe novelty, this mode deliberately introduces a moderate mismatch to elicit structural change through the integration of dissonant input.

Such disruption requires precise titration. The therapist calibrates intensity, pacing, and novelty based on real-time signals of arousal, coherence, and engagement. Research on alliance ruptures and repairs (Safran & Kraus, 2014), therapist responsiveness (Safran & Muran, 2000), and productive mismatch (Eubanks et al., 2018) highlight the potential of brief, well-supported dysregulation. Polyvagal-informed strategies (Porges, 2022) help sustain engagement across shifts in autonomic arousal, while voice tone, timing, and gaze support re-centering (Kykyri et al., 2017). The therapist's stance in this mode is neither purely holding nor confrontational, but flexibly oscillates between disruption and repair. The voice may firm to challenge avoidance, then soften to restore the connection. Emotion-focused and experiential models (Fosha, 2021; Greenberg, 2017) similarly rely on mismatched input - when safely held - to activate change. In this process, the safety zone is transforming from a boundary into a developmental scaffold, where resilience is built not by avoiding distress, but by integrating it within a secure therapeutic relationship. This co-regulated dissonance strengthens the client's capacity to integrate new, adaptive experiences, fostering deeper self-organization and structural reconfiguration.

Repairing the Safety Zone: Restoring Coherence and Rhythm After Disruption

This regulatory function addresses rupture and disorganization by restoring coherence without collapsing the expanded safety zone, through reattuned co-regulation that rebuilds synchrony and shared understanding. Whereas disruption introduces manageable mismatch, repair works through re-coordination - restoring synchrony and shared meaning after temporary dysregulation. The therapist functions here as a relational reattuner, helping the client metabolize disruption while preserving the integrity of the therapeutic bond.

Safety is regulated through micro-repair processes: slowing the pace, naming the rupture, revisiting the therapeutic contract, and offering supportive reflection or metacommunication to rebuild mutual understanding. When clients withdraw, dissociate, or comply, the therapist uses gesture, gaze, or gentle verbal cues to guide the dyad back into the safety zone (Kykyri et al., 2017; Fonagy & Allison, 2014). These moments are not about explanation alone but about re-establishing intersubjective rhythm (Soma et al., 2020). Safran and Kraus (2014) describe a therapist recognizing a rupture after offering an interpretation too soon. The therapist pauses and says, "I think I got ahead of you—can we go back a moment?" This brief repair reorients the client and reaffirms the safety of the relationship.

This type of relational reattunement exemplifies the repair mode of safety regulation, in which coherence is restored through empathic responsiveness and engagement. In this mode, the safety zone serves less as a boundary and more as relational elasticity - a space where disruption and connection can coexist. Rather than reverting to a safer baseline, clients learn ruptures are survivable and meaningful when processed together. Repair thus deepens structural resilience, not by extending capacity but by reinforcing coherence. Through this process, the client's internal map of safety is reinforced, expanding capacity to tolerate and recover from disruption. The therapist's presence and emotionally attuned voice anchor the client, allowing disruption to become part of an integrated relational experience (Fosha, 2021; Safran & Kraus, 2014).

Internalizing an Expanded Safety Zone: Consolidating Change and Supporting Autonomy

This regulatory function centers on integration - stabilizing therapeutic gains and transferring co-regulation into the client's internal system, where the safety zone becomes self-sustaining and less dependent on the therapist. The therapist now acts as a companion in autonomy, remaining available but receding from active guidance as the client develops independent regulatory capacity. Safety is no longer primarily co-created but gradually internalized as a self-sustaining resource. Regulation in this mode focuses on consolidating adaptive shifts, including working through recent novelty so it can be fully integrated rather than temporarily enacted. The therapist attends to successful enactments of change, reinforces moments of resilience, and links in-session regulation to the client's life outside therapy (Pascual-Leone et al., 2016). Vocal tone and pacing still matter but take a supporting role, as the client increasingly draws on internal cues to manage arousal and relational demands (Tao et al., 2022).

The safety zone now functions as an internalized procedural model - less a buffer from distress, and more a map for navigating affective and relational complexity. The therapist monitors for signs of residual dependency or premature disengagement, adjusting proximity to the support agency without reactivating regression. Guided by the therapeutic zone of proximal development (Leiman & Stiles, 2001), interventions promote autonomous regulation while preserving the option for brief relational recalibration when needed. Pascual-Leone et al. (2016) observed that clients sometimes began sessions by saying things like, "I used what we practiced last week, and it helped." A therapist might reflect, "That sounds like you trusted yourself with this," thereby reinforcing the client's agency and self-regulation.

This moment illustrates the internalizing mode, where clients begin to consolidate therapeutic gains and regulate more independently, drawing on previously co-created safety without relying on ongoing external support. In this regulatory mode, the safety zone serves as both the outcome and launchpad. No longer scaffolded externally, it supports the client's capacity to engage flexibly, think coherently, and regulate affect across varied contexts. Resilience emerges from this process as the internalized capacity to remain regulated, explore novelty, and recover from challenges without losing coherence. As the safety zone becomes internalized, the client integrates new self-narratives and relational capacities, fostering a coherent and resilient sense of self that endures beyond the therapeutic relationship.

What Empirical Research Reveals About Safety Regulation

Empirical findings across psychotherapy, developmental science, neuroscience, and attachment theory offer substantial—if mostly indirect—support for safety regulation as a dynamic process, with research highlighting key process-level dynamics and relational outcomes. Rather than presenting a systematic review, this section highlights areas of convergence that reinforce the model's conceptual foundation and suggest directions for future inquiry.

A consistent theme is that safety emerges through relational interaction rather than existing as a fixed precondition. Clients and therapists report that safety develops through responsiveness and emotional presence (Timulak, 2007; Levitt et al., 2016) and that such processes support recursive models of change based on cycles of activation and co-regulation (Timulak, 2010; Mair, 2021). Attachment theory further grounds this view. Securely attached clients form stronger alliances and show better outcomes (Mikulincer et al., 2013; Bernecker et al., 2014; Levy et al., 2018), while those with insecure attachment are more rupture-prone (Talia et al., 2017). Therapists' attachment styles also influence safety, with secure therapists demonstrating greater attunement and flexibility (Rubino et al., 2000; Degnan et al., 2016). The Patient Attachment Coding System (Talia et al., 2019) links in-session attachment security with therapeutic depth and outcome (Janzen et al., 2008; Mallinckrodt et al., 2005), highlighting the importance of attuned emotional availability, especially early in therapy.

Responsiveness to client feedback further supports the model. Therapists who adapt interventions moment to moment build stronger alliances (Ackerman & Hilsenroth, 2003), underscoring the role of real-time calibration. Empirical studies grounded in the Control-Mastery Theory demonstrate that therapists' moment-to-moment responsiveness to client behaviors—particularly during subtle testing interactions - predicts therapeutic progress (Gazzillo, 2024). These findings further support the view that dynamic safety regulation is a core mechanism of change. Polyvagal theory (Porges, 2022) and studies on interpersonal synchrony show that voice, breath, and posture influence the client's nervous system states (Kykyri et al., 2017; Soma et al., 2023), especially near the edge of the safety zone. Rupture and repair research confirms the model's emphasis on regulated disruption. Studies by Safran and Muran (2000), and Safran and Kraus (2014) show that successful repair enhances trust and outcomes, supporting the clinical value of tolerable disruption followed by reconnection. Moreover, repeated co-regulation fosters long-term change. Clients consistently met with attunement develop greater self-regulatory capacity (Pascual-Leone et al., 2016; Tao et al., 2022), aligning with the model's view of internalizing the safety zone. In systemic and group settings, safety enhances engagement, conflict resolution, and emotional expression (Friedlander et al., 2006), showing its relevance beyond the dyad.

Though widely viewed as relational and dynamic, safety remains empirically underexplored. The safety zone model is currently untested, and existing tools lack the precision to track its momentary shifts. By offering a more precise vocabulary of regulatory modes, the model aims to support future research into how safety is co-regulated across sessions and contexts. Future studies could examine the timing and sequencing of regulatory modes and explore how these vary across clinical populations and cultural settings - advancing the understanding of safety regulation as an observable and dynamic process.

To support empirical progress, the model invites specific research questions: How can therapists' shifts between regulatory modes be reliably coded in session transcripts or video data? Can vocal prosody, gesture, or rhythm be used to map moment-to-moment safety modulation (Kykyri et al., 2017; Soma et al., 2023)? What client markers indicate that the safety zone is expanding or collapsing? Studies using session-based microanalysis, interpersonal synchrony metrics, or idiographic case designs may be especially suited to operationalizing safety regulation in clinical research. Further, therapist training programs could incorporate mode recognition as a variable influencing alliance and outcome.

Implications for Practice, Supervision, and Clinical Reasoning

The model replaces broad notions of "creating a safe space" with a procedurally defined, dynamically regulated safety zone. It clarifies when and how therapists can adjust their stance. Distinct modes - grounding, attending, attuning, stretching, disrupting, repairing, internalizing - can be practiced, tracked, and reflected upon. In supervision and training, the model provides a vocabulary to distinguish helpful emotional pacing from overprotection, and tolerable disruption from premature challenge. While these regulatory modes are recursive and context-sensitive rather than fixed in sequence, therapists may often navigate them in recurring arcs—initially focusing on containment and attending, then shifting toward attunement, stretching, disruption, and repair, and later supporting integration and internalization of new regulatory capacities. The model supports a developmental logic for guiding therapists, especially in trauma, affect intolerance, or relational rigidity. Supervisors are also encouraged to consider how therapists' safety states influence their regulatory capacity.

In clinical practice, the model enhances moment-to-moment awareness. Therapists can track shifts - such as from holding to challenge - and assess whether these remain within the client's safety zone. This metacognitive stance helps prevent rupture and promotes understanding safety as an ongoing process. It also facilitates integrative practice by offering a shared framework across orientations. By organizing diverse interventions around the modulation of engagement, the model supports resilience, affective coherence, and adaptive flexibility. The safety zone becomes a guide for pacing and a developmental scaffold for autonomy and self-efficacy.

Concluding Reflections: Modulating Safety as the Core Process of Change

This model reframes safety not as a preparatory phase or static condition, but as a dynamic, recursive, and psychically complex mechanism central to therapeutic change. It integrates key functions – attending, attuning, challenging, disrupting, repairing, and consolidating - into a coherent arc that tracks how change unfolds. Rather than idealizing safety or discomfort, the model emphasizes their integration: resilience emerges not from avoiding discomfort, but from metabolizing it within secure relational regulation. Effective change depends on when safety is introduced, how discomfort is tolerated, and how both are integrated. This challenges linear models and provides a transtheoretical language for guiding intervention across modalities.

Though not yet empirically tested, the model is grounded in theory and clinical observation, and it offers a research-informed, testable hypothesis for empirical validation through microanalysis and multimodal measurement. It organizes widely accepted but under-specified processes into a practical framework for real-time decision-making. It makes implicit processes explicit and invites empirical inquiry across traditions. If safety is indeed foundational to change, understanding how it is dynamically regulated is essential. The safety zone model offers clinicians, supervisors, and researchers a conceptual and empirical bridge to one of psychotherapy's most cited yet least operationalized mechanisms: the modulation of safety as a process of change. These modes of regulation may serve as a clinical compass - helping therapists across traditions stay attuned, flexible, and oriented as they accompany clients beyond comfort and into transformation.

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Declarations

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References

Ackerman, S. J., & Hilsenroth, M. J. (2003). A review of therapist characteristics and techniques positively impacting the therapeutic alliance. *Clinical Psychology Review*, *23*(1), 1–33. https://doi.org/10.1016/S0272-7358(02)00146-0

Ainsworth, M. D. S. (2010). Security and attachment. In R. Volpe (Ed.), *The secure child: Timeless lessons in parenting and childhood education*. IAP Information Age Publishing. pp. 43–53

Beck, A. T., Rush, A. J., Shaw, B. F., Emery, G., DeRubeis, R. J., & Hollon, S. D. (2024). *Cognitive therapy of depression*. Guilford.

Beebe, B., & Lachmann, F. (2020). Infant research and adult treatment revisited: Cocreating self- and interactive regulation. *Psychoanalytic Psychology*, *37*(4), 313–323. https://doi.org/10.1037/pap0000305

Bernecker, S. L., Levy, K. N., & Ellison, W. D. (2014). A meta-analysis of the relation between patient adult attachment style and the working alliance. *Psychotherapy Research*, *24*(1), 12–24. https://doi.org/10.1080/10503307.2013.809561

Bion, W. R. (1962). A theory of thinking. *International Journal of Psychoanalysis*, *43*, 306–310.

Bowlby, J. (1973). *Attachment and loss. Vol. 2. Separation, anxiety and anger*. Basic books.

Bowlby, J. (1988). *A secure base: Clinical applications of attachment theory*. Routledge.

Crittenden, P. M. (2006). A Dynamic-Maturational model of attachment. *ANZJFT Australian and New Zealand Journal of Family Therapy*, *27*(2), 105–115. https://doi.org/10.1002/j.1467-8438.2006.tb00704.x

Degnan, A., Seymour-Hyde, A., Harris, A., & Berry, K. (2016). The role of therapist attachment in alliance and outcome: A systematic literature review. *Clinical Psychology & Psychotherapy*, *23*(1), 47–65. https://doi.org/10.1002/cpp.1937

Dellucci, H., & Vojtová, H. (2012). EMDR solution focused. In A. Lewiński, J. Szczepkowski, & T. Świtek (Eds.), *Upside down: Solution focused paradigms – Revolutions and evolutions* (pp. 111–132). Wydawnictwo Edukacyjne AKAPIT.

Ehlers, A., & Clark, D. M. (2000). A cognitive model of posttraumatic stress disorder. *Behaviour Research and Therapy*, *38*(4), 319–345. https://doi.org/10.1016/S0005-7967(99)00123-0

Eubanks, C. F., Muran, J. C., & Safran, J. D. (2018). Alliance rupture repair: A meta-analysis. *Psychotherapy*, *55*(4), 508–519. https://doi.org/10.1037/pst0000185

Fiorenza, E., Santodoro, M., Dazzi, N., & Gazzillo, F. (2023). Safety in control-mastery theory. In *International Forum of Psychoanalysis*. Routledge. *32*(2), 93–104. https://doi.org/10.1080/0803706X.2023.2168056

Flückiger, C., Del Re, A. C., Wampold, B. E., & Horvath, A. O. (2018). The alliance in adult psychotherapy: A meta-analytic synthesis. *Psychotherapy*, *55*(4), 316–340. https://doi.org/10.1037/pst0000172

Flückiger, C., Del Re, A. C., Wampold, B. E., Symonds, D., & Horvath A. O. (2012). How central is alliance in psychotherapy? A multilevel longitudinal meta-analysis. *Journal of Counseling Psychology*, *59*(1), 10–17.

Fonagy, P., & Allison, E. (2014). The role of mentalizing and epistemic trust in the therapeutic relationship. *Psychotherapy*, *51*(3), 372–380. https://doi.org/10.1037/a0036505

Fosha, D. E. (2021). *Undoing aloneness & the transformation of suffering into flourishing: AEDP 2.0*. American Psychological Association. https://doi.org/10.1037/0000232-000

Friedlander, M. L., Escudero, V., Horvath, A. O., Heatherington, L., Cabero, A., & Martens, M. P. (2006). System for observing family therapy alliances: A tool for research and practice. *Journal of Counseling Psychology*, *53*(2), 214–225. https://doi.org/10.1037/0022-0167.53.2.214

Gazzillo, F., Genova, F., Fedeli, F., Curtis, J. T., Silberschatz, G., Bush, M., & Dazzi, N. (2019). Patients' unconscious testing activity in psychotherapy: A theoretical and empirical overview. *Psychoanalytic Psychology*, *36*(2), 173–183. https://doi.org/10.1037/pap0000227

Gazzillo, F., Mannocchi, C., Curtis, J., Biuso, G. S., De Luca, E., Fimiani, R., Fiorenza, E., Genova, F., La Stella, M., Leonardi, J., Rodomonti, M., & Silberschatz, G. (2024). Passing patients' tests and following patients' coaching communications in psychotherapy: An empirical study. *Counselling Psychology Quarterly*. Advance online publication. https://doi.org/10.1080/09515070.2024.2354283

Gelo, O. C. G., & Salvatore, S. (2016). A dynamic systems approach to psychotherapy: A meta-theoretical framework for explaining psychotherapy change processes. *Journal of Counseling Psychology*, *63*(4), 379–395. https://doi.org/10.1037/cou0000150

Gilbert, P. (2024). Threat, safety, safeness and social safeness 30 years on: Fundamental dimensions and distinctions for mental health and well-being. *British Journal of Clinical Psychology*, *63*(3), 453–471. https://doi.org/10.1111/bjc.12466

Greenberg, L. S. (2017). *Emotion-focused therapy*. American Psychological Association.

Janzen, J., Fitzpatrick, M., & Drapeau, M. (2008). Processes involved in client-nominated relationship-building incidents: Client attachment, attachment to therapist, and session impact. *Psychotherapy: Theory Research Practice Training*, *45*(3), 377–390. https://doi.org/10.1037/a0013310

Kottler, J. A. (2022). *On being a therapist*. Oxford University Press.

Kykyri, V. L., Karvonen, A., Wahlström, J., Kaartinen, J., Penttonen, M., & Seikkula, J. (2017). Soft prosody and embodied attunement in therapeutic interaction: A multimethod case study of a moment of change. *Journal of Constructivist Psychology*, *30*(3), 211–234. https://doi.org/10.1080/10720537.2016.1183538

Leiman, M., & Stiles, W. B. (2001). Dialogical sequence analysis and the zone of proximal development as conceptual enhancements to the assimilation model: The case of Jan revisited. *Psychotherapy Research*, *11*(3), 311–330. https://doi.org/10.1093/ptr/11.3.311

Levitt, H. M., Pomerville, A., & Surace, F. I. (2016). A qualitative meta-analysis examining clients' experiences of psychotherapy: A new agenda. *Psychological Bulletin*, *142*(8), 801–830. https://doi.org/10.1037/bul0000057

Levy, K. N., Kivity, Y., Johnson, B. N., & Gooch, C. V. (2018). Adult attachment as a predictor and moderator of psychotherapy outcome: A meta-analysis. *Journal of Clinical Psychology*, *74*(11), 1996–2013. https://doi.org/10.1002/jclp.22685

Mair, H. (2021). Attachment safety in psychotherapy. *Counseling and Psychotherapy Research*, *21*(3), 710–718. https://doi.org/10.1002/capr.12370

Mallinckrodt, B., Choi, G., & Daly, K. D. (2015). Pilot test of a measure to assess therapeutic distance and its association with client attachment and corrective experience in therapy. *Psychotherapy Research*, *25*(5), 505–517. https://doi.org/10.1080/10503307.2014.928755

Mallinckrodt, B., Porter, M. J., & Kivlighan, D. M. (2005). Client attachment to therapist, depth of in-session exploration, and object relations in brief psychotherapy. *Psychotherapy: Theory Research Practice Training*, *42*(1), 85–100. https://doi.org/10.1037/0033-3204.42.1.85

Messina, I., Calvo, V., & Grecucci, A. (2024). Attachment orientations and emotion regulation: New insights from the study of interpersonal emotion regulation strategies. *Research in Psychotherapy: Psychopathology Process and Outcome*, *26*(3), 703. https://doi.org/10.4081/ripppo.2023.703

Messina, I., Maniglio, R., & Spataro, P. (2023). Attachment insecurity and depression: The mediating role of interpersonal emotion regulation. *Cognitive Therapy and Research*, *47*(4), 637–647. https://doi.org/10.1007/s10608-023-10386-5

Mikulincer, M., Shaver, P. R., & Berant, E. (2013). An attachment perspective on therapeutic processes and outcomes. *Journal of Personality*, *81*(6), 606–616. https://doi.org/10.1111/j.1467-6494.2012.00806.x

Norcross, J. C., & Goldfried, M. R. (Eds.). (2019). *Handbook of psychotherapy integration* (3rd ed.). Oxford University Press. https://doi.org/10.1093/med-psych/9780190690465.001.0001

Panksepp, J., & Biven, L. (2012). *The archaeology of mind: Neuroevolutionary origins of human emotions*. Norton.

Pascual-Leone, A., Yeryomenko, N., Morrison, O. P., Arnold, R., & Kramer, U. (2016). Does feeling bad, lead to feeling good? Arousal patterns during expressive writing. *Review of General Psychology*, *20*(3), 336–347. https://doi.org/10.1037/gpr0000083

Podolan, M., & Gelo, O. C. (2024). The role of safety in change-promoting therapeutic relationships: An integrative relational approach. *Clinical Neuropsychiatry*, *21*(5), 403. https://doi.org/10.36131/cnfioritieditore20240505

Podolan, M., & Gelo, O. C. G. (2023). The functions of safety in psychotherapy: An integrative theoretical perspective across therapeutic schools. *Clinical Neuropsychiatry*, *20*(3), 193–204. https://doi.org/10.36131/CNFIORITIEDITORE20230304

Porges, S. W. (2022). Polyvagal theory: A science of safety. *Frontiers in integrative neuroscience*, *16*, 871227. https://doi.org/10.3389/fnint

Prochaska, J. O., & DiClemente, C. C. (2019). The transtheoretical approach. In J. C. Norcross, & M. R. Goldfried (Eds.), *Handbook of psychotherapy integration*. 3rd ed. Oxford University Press. pp. 161–183. https://doi.org/10.1093/med-psych/9780190690465.003.0008

Rogers, C. R. (1957). The necessary and sufficient conditions of therapeutic personality change. *Journal of Consulting Psychology*, *21*(2), 95. https://doi.org/10.1037/h0045357

Rubino, G., Barker, C., Roth, T., & Fearon, P. (2000). Therapist empathy and depth of interpretation in response to potential alliance ruptures: The role of therapist and patient attachment styles. *Psychotherapy Research*, *10*(4), 408–420. https://doi.org/10.1093/ptr/10.4.408

Safran, J. D., & Kraus, J. (2014). Alliance ruptures, impasses, and enactments: A relational perspective. *Psychotherapy*, *51*(3). https://doi.org/10.1037/a0036815

Safran, J. D., & Muran, J. C. (2000). Resolving therapeutic alliance ruptures: Diversity and integration. *Journal of Clinical Psychology*, *56*(2), 233–243. https://doi.org/10.1002/(SICI)1097-4679(200002)56:2%3c233::AID-JCLP9%3e3.0.CO;2-3

Schore, A. (2019). *Right brain psychotherapy (Norton series on interpersonal neurobiology)*. WW Norton & Company.

Siegel, D. J. (2012). *The developing mind: How relationships and the brain interact to shape who we are* (2nd ed.). The Guilford Press.

Silberschatz, G. (2017). *Transformative relationships: The Control-Mastery theory of psychotherapy.* Routledge.

Soma, C. S., Baucom, B. R., Xiao, B., Butner, J. E., Hilpert, P., Narayanan, S., & Imel, Z. E. (2020). Coregulation of therapist and client emotion during psychotherapy. *Psychotherapy Research*, *30*(5), 591–603. https://doi.org/10.1080/10503307.2019.1661541

Soma, C. S., Knox, D., Greer, T., Gunnerson, K., Young, A., & Narayanan, S. (2023). It's not what you said, it's how you said it: An analysis of therapist vocal features during psychotherapy.

Counselling and Psychotherapy Research, *23*(1), 258–269. https://doi.org/10.1002/capr.12489

Springstein, T., Hamerling-Potts, K. K., Landa, I., & English, T. (2023). Adult attachment and interpersonal emotion regulation motives in daily life. *Emotion*, *23*(5), 1281. https://doi.org/10.1037/emo0001169

Stiles, W. B., Gabalda, C., I., & Ribeiro, E. (2016). Exceeding the therapeutic zone of proximal development as a clinical error. *Psychotherapy*, *53*(3), 268–272. https://doi.org/10.1037/pst0000061

Talia, A., Miller-Bottome, M., & Daniel, S. I. F. (2017). Assessing attachment in psychotherapy: Validation of the patient attachment coding system (PACS). *Clinical Psychology & Psychotherapy*, *24*(1), 149–161. https://doi.org/10.1002/cpp.1990

Talia, A., Miller-Bottome, M., Katznelson, H., Pedersen, S. H., Steele, H., Schröder, P., Origlieri, A., Scharff, F. B., Giovanardi, G., Andersson, M., Lingiardi, V., Safran, J. D., Lunn, S., Poulsen, S., & Taubner, S. (2019). Mentalizing in the presence of another: Measuring reflective functioning and attachment in the therapy process. *Psychotherapy Research*, *29*(5), 652–665. https://doi.org/10.1080/10503307.2017.1417651

Tao, D., Lee, T., Chui, H., & Luk, S. (2022). Characterizing Therapist's Speaking Style in Relation to Empathy in Psychotherapy. *arXiv preprint arXiv:2203.*13127.

Timulak, L. (2007). Identifying core categories of client-identified impact of helpful events in psychotherapy: A qualitative meta-analysis. *Psychotherapy Research*, *17*(3), 305–314. https://doi.org/10.1080/10503300600608116

Timulak, L. (2010). Significant events in psychotherapy: An update of research findings. *Psychology and Psychotherapy: Theory Research and Practice*, *83*(4), 421–447. https://doi.org/10.1348/147608310X499404

Van der Kolk, B. A. (2015). *The body keeps the score: Brain, mind, and body in the healing of trauma*. Penguin Books.

Wampold, B. E., & Imel, Z. E. (2015). *The great psychotherapy debate: The evidence for what makes psychotherapy work* (2nd ed.). Routledge.

Winnicott, D. W. (1960). The theory of the parent-infant relationship. *International Journal of Psychoanalysis*, *41*(6), 585–595.

Xi, J., & Lantolf, J. P. (2021). Scaffolding and the zone of proximal development: A problematic relationship. *Journal for the Theory of Social Behaviour*, *51*(1), 25–48. https://doi.org/10.1111/jtsb.12260

Yalom, I. D. (1980). *Existential psychotherapy*. Basic Books.

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