GRUPO EDITORIAL DE PSICOFUNDACIÓN

Revista de Psicoterapia (2026) 37(134) 18-26

Revista de Psicoterapia

https://revistadepsicoterapia.com • e-ISSN: 2339-7950

Universidad Nacional de Educación a Distancia (UNED)

Article

Beyond Integration: A Critical Analysis of Quiñones' Evolutionary Case Formulation Model (ECF)

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ARTICLE INFO

Received: 11/05/2026
Accepted: 01/06/2026

Keywords:
Case formulation
Integrative psychotherapy
Constructivism
Personalized psychotherapy
Fuzzy cognitive maps

ABSTRACT

This article presents a critical review of Álvaro Quiñones' Evolutionary Case Formulation: Developing a Unified Language for the Practice of Psychotherapy. The book proposes a case formulation model grounded in evolutionary and intersubjective principles that aims to provide a common language for integrating different psychotherapeutic orientations. Its main strengths include conceptual rigor, an emphasis on shared meaning-making, and a balance between structure and flexibility. From a constructivist perspective, the review highlights its affinities with Personal Construct Psychology, narrative therapy, and other meaning-centered approaches. The potential integration of the model with Fuzzy Cognitive Maps is also explored as a method for psychotherapy personalization. Overall, the book represents an original and valuable contribution to the development of integrative, idiographic, and dynamic models of clinical case formulation.

Más Allá de la Integración: Un Análisis Crítico del Modelo de Formulación de Casos Evolutivos (ECF) de Quiñones

Palabras clave:
Formulación de casos
Psicoterapia integrativa
Constructivismo
Psicoterapia personalizada
Mapas cognitivos borrosos

RESUMEN

Este artículo presenta una revisión crítica de Evolutionary Case Formulation: Developing a Unified Language for the Practice of Psychotherapy, de Álvaro Quiñones. El libro propone un modelo de formulación de casos basado en principios evolutivos e intersubjetivos que busca ofrecer un lenguaje común para integrar distintas orientaciones psicoterapéuticas. Se destacan como principales fortalezas su solidez conceptual, su énfasis en la construcción compartida de significados y su equilibrio entre estructura y flexibilidad. Desde una perspectiva constructivista, se analizan sus afinidades con la Psicología de los Constructos Personales, la terapia narrativa y otros enfoques centrados en el significado. Asimismo, se explora su posible integración con los Mapas Cognitivos Borrosos como herramienta para la personalización de la psicoterapia. En conjunto, la obra constituye una aportación original y valiosa al desarrollo de modelos integradores, idiográficos y dinámicos de formulación clínica.

Cite as: Botella, L. (2026). Beyond integration: A critical analysis of Quiñones' Evolutionary Case Formulation Model (ECF). *Revista de Psicoterapia, 37*(134), 18-26. https://doi.org/10.5944/rdp.v37i134.49125

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Introduction

In the last two decades, the field of psychotherapy has been increasingly concerned with the need to bridge the epistemological and practical divides between therapeutic schools. As clinicians and researchers move toward more integrative, process-based approaches, the formulation of clinical cases has emerged as a critical space for innovation. No longer merely a theoretical exercise, case formulation is now recognized as a core clinical skill that must capture both the personal meaning of a client's difficulties and the structural dynamics that maintain psychological suffering over time.

Within this context, *Evolutionary Case Formulation: Developing a Unified Language for the Practice of Psychotherapy*, by Álvaro Quiñones (Quiñones, 2024), offers a bold and ambitious attempt to address this fragmentation. Grounded in evolutionary theory and informed by empirical studies of psychotherapy transcripts, the Evolutionary Case Formulation (ECF) model proposes a structured yet flexible language that aims to foster integration across psychotherapeutic traditions.

The book is not simply another attempt to synthesize therapeutic schools through eclecticism. Rather, it offers a model of meaning-based, domain-sensitive formulation that centers on human adaptation, distress regulation, and intersubjective experience. The central thesis is that psychotherapy must evolve toward a shared language capable of accounting for the plurality of human experience without sacrificing conceptual coherence or clinical utility.

From a constructivist standpoint—and particularly from our own work in Fuzzy Cognitive Mapping (FCM) as a method for dynamic case formulation—this proposal resonates deeply. The emphasis on personal meanings, dynamic regulation processes, and co-construction of explanatory models situates the ECF framework in close proximity to constructivist and narrative paradigms. More importantly, it opens up a fruitful dialogue between structured modeling and idiographic understanding, an interface that I have explored extensively through the development of cognitive-affective maps for psychotherapy personalization.

The perspective adopted in this analysis is informed by more than three decades of clinical, supervisory, and research work within constructivist and integrative psychotherapy traditions, particularly in the areas of personalized case formulation, narrative approaches, and the development of Fuzzy Cognitive Maps (FCMs) for psychotherapy process modeling. Although I have not formally applied the complete ECF protocol in clinical practice, many of its assumptions resonate strongly with ongoing work in constructivist and complexity-informed psychotherapy research.

This review aims to critically examine the conceptual and practical contributions of *Evolutionary Case Formulation*, highlighting its strengths, discussing its limitations, and situating it in the wider context of personalized and integrative approaches to psychotherapy. Particular attention will be paid to its points of convergence with constructivist case formulation, as well as to the potential for synergies with computationally assisted methods such as FCMs, which can complement the narrative and domain-based approach of the ECF protocol.

This manuscript is conceived as a critical analytical review rather than a conventional book review. Its purpose is not only to summarize the content of Evolutionary Case Formulation, but also to examine its epistemological assumptions, clinical implications, integrative potential, and possible limitations in light of contemporary developments in constructivist, idiographic, and process-oriented psychotherapy approaches.

Overview of the Evolutionary Case Formulation (ECF) Model

The Evolutionary Case Formulation (ECF) model stands out in the contemporary landscape of psychotherapy theory due to its ambition to articulate a unified, evolutionarily informed language for clinical understanding. It is not merely a diagnostic framework, nor a checklist of symptoms and behaviors. Instead, it represents a structured, narrative, and domain-sensitive method for grasping the functional and dysfunctional patterns that emerge in a person's life in the face of relational, emotional, and existential challenges.

Epistemological Foundations

Quiñones roots the model in an evolutionary epistemology, positing that human psychological functioning—and dysfunction—can be meaningfully understood through the lens of adaptation. Psychopathology, in this view, does not represent a "failure" or a deviation from normalcy, but rather an overextension, distortion, or rigidity of once-adaptive strategies in the face of shifting environments and relational contexts.

Crucially, this evolutionary logic is not used in a biological reductionist sense. Rather, it serves as a generative metaphor and integrative principle: the model traces how individuals construct and sustain patterns of regulation (and dysregulation) of self, emotion, interpersonal relationships, and meaning-making systems that once supported survival, belonging, or agency, but have since become problematic.

This adaptive/maladaptive tension grounds the entire model, allowing it to maintain clinical depth without relying on categorical nosology or pathologizing assumptions. The therapist, within this model, is not a diagnostician but a collaborator in narrative reconstruction, helping the client understand how their current difficulties were once meaningful responses to their environment.

The Domains of Intersubjective Functioning

A hallmark of ECF is its classification of human experience into a series of "domains" of intersubjective functioning, grouped hierarchically:

a) *First-order intersubjective knowledge domains:* The Self System, which includes Sense of Agency/Efficacy, Sense of Self-Narrative/Coherence, Sense of Time/Balance, Sense of Self-Esteem/Self-Deception, Sense of Self-Care/Health.
b) *Second-order intersubjective knowledge domains:* Cognition, Emotion, Interpersonal, Imagination, Corporeality, Sexuality, and Religiosity/Spirituality.

Each domain is conceptualized as a locus of meaning, not a diagnostic category. For instance, the Emotion domain is not reduced to affective symptoms but considered a dynamic field in which the person regulates affective experiences, anticipates danger or intimacy, and constructs emotional narratives about the self and others.

This domain model reflects an appreciation for both universality and singularity: while all humans possess these domains, their expressions are deeply shaped by personal, cultural, and relational histories. The model encourages clinicians to explore how each domain is organized for a particular person, and how their current distress may emerge from conflicts, avoidances, or rigid patterns within or across domains.

The inclusion of Imagination and Religiosity/Spirituality as full-fledged domains is especially noteworthy. These areas are often underexplored in standard formulation models, despite their central role in constructing hope, metaphors of change, and existential orientation. Their presence reinforces the model's commitment to honoring the complex, meaning-laden nature of psychological life.

Narrative Thematization and Dysfunctional Patterns

Rather than relying solely on linear causal reasoning, ECF emphasizes narrative thematization: the identification of recurring patterns of experience, behavior, and relational dynamics that can be narrated through the client's own voice. These themes, such as "recurrent self-invalidation in the face of critical figures" or "a fragmented time perspective rooted in unresolved trauma", are not interpreted from above but constructed collaboratively.

The model provides a detailed process of identifying dysfunctional interactional cycles across domains. These are mapped into explanatory narratives that articulate:

a) The adaptive origin of current patterns.
b) The intersubjective contexts that maintain or trigger these responses.
c) The costs and consequences of continued reliance on these patterns.

This method resonates with constructivist approaches to case formulation, where the goal is not to define what is wrong with the client but to articulate how their suffering makes sense within their experiential system.

Functional Axes: Regulation and Distress

To provide clinical structure, ECF introduces two rating axes:

a) *Axis I:* Psychological Regulation (Regulated–Dysregulated)
b) *Axis II:* Psychological Well-being (Well–Distressed)

These axes allow therapists to track change in both subjective and functional terms. The use of axes—rather than categories—echoes dimensional models of psychopathology and avoids the pitfalls of binary diagnostic logic. More importantly, these ratings are not imposed on the client but co-constructed in the therapy process, allowing for shared language and meaning-making.

The Protocol: Assessment, Formulation, and Intervention

The model is operationalized through a three-part protocol:

1. *Psychotherapy Process Assessment Interview (PPAI):* Designed to elicit rich narrative content across domains.
2. *Evolutionary Case Formulation-Evaluation (ECF-E):* The clinician synthesizes information into a shared explanatory narrative, identifying themes and dysfunctional patterns.
3. *Evolutionary Case Formulation-Intervention (ECF-I):* Interventions are selected and monitored according to the themes and regulatory needs identified.

Each stage is supported by narrative tools, tracking matrices, and domain-specific reflections. Importantly, this process is *not unidirectional:* formulation is revisited, revised, and renegotiated throughout therapy as the client's narrative evolves.

Strengths of the ECF Framework

The *Evolutionary Case Formulation* model represents a significant contribution to the theory and practice of psychotherapy, both for its conceptual clarity and for its practical utility. Several distinctive strengths make this model particularly relevant in the current landscape of clinical psychology, where demands for integration, personalization, and empirical grounding are increasingly shaping the expectations placed on formulation methods.

A Unifying Framework Across Therapeutic Schools

Perhaps the most outstanding achievement of the ECF model is its potential to unify psychotherapeutic traditions without resorting to eclecticism or reductionism. By situating psychological suffering within the broader frame of human adaptation and intersubjective functioning, the model sidesteps many of the tensions that have historically divided therapeutic schools.

Cognitive-behavioral therapists, for instance, can find resonance in the focus on regulation processes and pattern identification, while psychodynamic clinicians will recognize in the domain work a sophisticated attention to internalized relational patterns and narrative construction. Narrative, systemic, and existential therapists will appreciate the model's intersubjective and meaning-oriented stance. ECF does not ask the clinician to abandon their theoretical allegiances; rather, it offers a common language in which diverse perspectives can collaborate. In this respect, ECF also converges with emerging process-based approaches to psychotherapy, which seek to organize intervention around dynamic biopsychosocial processes rather than disorder-specific treatment packages (Hofmann & Hayes, 2019).

In this sense, the model is integrative not by synthesis, but by translation: it provides a shared semiotic and narrative scaffolding through which formulations from multiple epistemologies can be articulated, contrasted, or even hybridized.

Empirical Foundations in Process Research

One of the distinctive methodological features of the model is that its formulation structure and domain classification emerge from a rigorous qualitative analysis of psychotherapy transcripts, not from theoretical speculation alone. This bottom-up construction ensures that the model remains close to actual clinical discourse and client experience.

As such, ECF aligns with the growing trend in psychotherapy research toward process-outcome studies, micro-analytic studies of session content, and the use of idiographic evidence in theory-building. It demonstrates that conceptual rigor and empirical grounding need not be mutually exclusive. This emphasis on individualized and hypothesis-driven understanding is also consistent with contemporary views of psychotherapy case formulation as a core

integrative and idiographic clinical process rather than a secondary adjunct to diagnosis or manualized treatment (Eells, 2022).

Furthermore, the use of real cases—not abstract illustrations—adds credibility to the model's applicability. The 29-session case study presented in Part II is not idealized but replete with therapeutic challenges, negotiation of meaning, and shifts in perspective, making it an excellent example of formulation in action. The use of richly contextualized clinical material also aligns with pragmatic case study approaches, which view systematic exploration of individual therapeutic processes as a legitimate source of clinical and scientific knowledge (Fishman, 2005).

Emphasis on Intersubjectivity and Shared Meaning

Another major strength is the centrality of intersubjectivity—not merely as a philosophical backdrop, but as a concrete structuring principle for clinical dialogue. The domains are not private mental modules; they are inherently relational spaces in which meaning is co-constructed between self and others, past and present, imagined and real.

This aligns closely with contemporary constructivist and postmodern therapies, which have long argued that pathology is not located solely "within" the person, but in their relationship with language, culture, and the social environment. ECF adopts this stance but operationalizes it in a way that is both structured and clinically actionable.

The collaborative formulation process, in which themes are identified with the client and interventions emerge from co-negotiated understanding, reinforces the therapeutic alliance. This dialogic orientation is not incidental: it is epistemologically necessary in a model that takes seriously the client's voice as a source of valid knowledge.

Balance Between Structure and Flexibility

While the ECF protocol is detailed and rigorously laid out, it avoids rigidity. Clinicians are not forced into algorithmic thinking; instead, they are guided through a semi-structured process that honors clinical intuition, narrative exploration, and evolving understandings.

This balance between structure and flexibility is perhaps the most difficult to achieve in formulation models. Many current approaches either risk being too vague—offering inspirational principles but no concrete tools—or too mechanistic—transforming formulation into checklist-driven procedures. ECF navigates this tension by offering heuristic scaffolding: it gives therapists a map, but it is the therapist and client who decide where the journey goes.

This is particularly compatible with the use of visual and computational tools such as Fuzzy Cognitive Maps (FCMs), which I will discuss in section (Fuzzy Cognitive Maps as a Possible Complement to the ECF Framework). Both ECF and FCMs aim to help clinicians and clients build dynamic representations of experience without freezing it into static models. This ability to represent complexity without over-simplification is crucial in personalized psychotherapy.

Educational and Supervisory Potential

Beyond clinical work, the ECF model offers a powerful pedagogical framework for training clinicians in formulation skills. Its domain structure provides a comprehensive overview of the territories in which human meaning-making unfolds, while the protocol stages encourage reflective practice, critical thinking, and collaborative engagement.

In supervision contexts, ECF can help identify blind spots, frame therapeutic dilemmas, and organize session material in ways that foster deeper understanding of process and change. Moreover, its visual components (domain matrices, axes plots, narrative themes) can enhance supervision dialogues, much like FCM-based diagrams or cognitive-affective formulations do.

The model thus provides a common ground for formulation literacy—a clinical language that can be learned, taught, and refined over time, bridging the gap between theory and practice in psychotherapy education.

Challenges

While *Evolutionary Case Formulation* represents an important contribution to integrative psychotherapy, no model is without its challenges and open questions. In this section, I outline some of the challenges that may arise in its application, dissemination, and further development as areas in need of dialogue, refinement, or empirical extension. These reflections emerge both from a critical reading of the text and from my own work in developing tools for personalized case formulation, such as Fuzzy Cognitive Maps (FCMs).

Language, Translation, and Conceptual Accessibility

As the original model was developed in Spanish and later translated into English it may pose accessibility challenges for anglophone readers who are not familiar with the underlying theoretical currents, particularly those unfamiliar with European constructivist or phenomenological traditions.

Moreover, some terminology (e.g., "thematization," "intersubjective knowledge domains") may require careful unpacking for trainees or clinicians steeped in more protocol-driven or manualized approaches. A glossary, annotated examples, or companion materials might increase the model's reach and pedagogical impact in diverse clinical cultures.

That said, the fact that this translation even exists is a major strength: it opens a vital body of work to a global audience and invites cross-linguistic and cross-cultural perspectives on formulation—a move that aligns with the very spirit of the model itself.

Adoption Across Theoretical Allegiances

One of the most subtle but significant challenges is the epistemological leap that the model requires from clinicians trained in more linear or mechanistic traditions. While the structure intersubjective knowledge domains (first and second order) and regulation axes offer a grounded entry point, the broader construct of intersubjective meaning-making and narrative co-construction may feel foreign to clinicians whose training emphasizes objective diagnosis, standardized assessments, or protocol-based treatment.

Integrative models always walk a tightrope between being open enough to accommodate multiple perspectives and being

structured enough to offer clarity. In this regard, ECF succeeds remarkably well, but its adoption will likely depend on institutional contexts, supervisory traditions, and the openness of training programs. As with any theoretical innovation, dissemination requires cultural translation as much as conceptual rigor.

An explicit bridge between ECF and existing models—such as the CBT case formulation framework by Persons (1989), the psychodynamic maps developed by Perry & Cooper (1986), or the Integrative Psychotherapy model of Prochaska & Norcross (2010)—might facilitate uptake among clinicians who are more familiar with those paradigms.

Population-Specific Applications

The model is richly illustrated through a detailed psychotherapy case with a midlife adult client facing intrapsychic and relational conflicts. However, it remains to be seen how well the ECF framework generalizes to other clinical populations, such as:

a) Children and adolescents, where domain salience and narrative coherence are still in development.
b) Clients with severe mental disorders (e.g., psychosis, complex PTSD) where meaning-making itself may be fragmented or disorganized.
c) Multicultural or linguistically diverse populations, where the domains of self, spirituality, or corporeality may be conceptualized differently.

To be fair, the model never claims universal applicability; its spirit is explicitly idiographic and relational. But future research might explore how domain configurations, thematic structuring, and regulation axes behave in more complex or cross-cultural clinical contexts. Such expansions would further strengthen its position as a framework for personalized formulation.

Operational Complexity and Time Demands

While the model offers a structured protocol, its full implementation—including a rich narrative interview, multidomain mapping, thematic analysis, and intervention tailoring—may require more time and training than most current service delivery systems allow.

This is not a flaw of the model per se; rather, it reflects the tension between clinical depth and institutional efficiency that plagues many therapeutic settings today. Nevertheless, ECF could benefit from a tiered application structure: for instance, offering "core" and "extended" versions of the protocol depending on the clinical setting (e.g., private practice vs. public mental health services).

Here, tools such as digital scaffolding, interactive formulation platforms, or visual mapping systems could facilitate implementation without compromising depth—a potential area where ECF and computational models like Fuzzy Cognitive Maps (FCMs) may find fertile convergence.

Empirical Validation and Outcome Research

Finally, while the model is rooted in transcript analysis and real-case applications, it remains relatively early in its empirical validation cycle. More broadly, contemporary psychotherapy research has increasingly emphasized the importance of identifying mechanisms and processes of change capable of explaining therapeutic improvement beyond protocol-specific effects (Kazdin, 2007). Key questions that merit future exploration include:

a) Does ECF-based formulation enhance therapeutic alliance or treatment outcomes compared to standard formulation models?
b) How do ECF's thematic domains align with dimensional models of psychopathology (e.g., HiTOP, RDoC)?
c) Can changes in regulation axes be tracked reliably over time and linked to symptom improvement?

A systematic program of research—combining qualitative and quantitative methods—could help solidify ECF's position not only as a conceptually robust model, but as an empirically supported practice framework.

A further question concerns the degree to which the ECF framework can maintain conceptual coherence while remaining broadly integrative. Integrative models sometimes risk becoming semantically expansive to the point where almost any clinical phenomenon can be incorporated post hoc. Future work may therefore need to clarify the boundaries of the model, its discriminative specificity, and the extent to which different clinicians converge when applying the formulation protocol to the same case material.

Connections With Constructivist Approaches

The *Evolutionary Case Formulation* model shares deep conceptual and clinical affinities with constructivist approaches to psychotherapy, particularly those grounded in the legacy of George A. Kelly's Personal Construct Theory, narrative therapy, and postmodern epistemologies of meaning. Though Quiñones does not explicitly align ECF with constructivism, the model's core principles—idiographic understanding, narrative thematization, co-construction of meaning, and multidimensional regulation—resonate strongly with constructivist foundations.

As someone who has worked extensively in constructivist case formulation and in the development of Fuzzy Cognitive Maps (FCMs) for personalized psychotherapy, I find ECF not only compatible with but also enriched by a constructivist reading. In this section, I outline some key points of convergence.

Epistemological Grounding: Constructivism and Evolutionary Meaning

At its heart, constructivism views human beings as active interpreters of their experience. Reality is not given, but constructed—through personal meanings, cultural narratives, and relational histories. In therapy, this translates into an epistemology of participation rather than observation: therapists do not "uncover" pathology but collaboratively explore the client's world of meanings.

ECF adopts a similar stance, but it frames this within an evolutionary-functional logic: psychological patterns are the result of adaptive efforts that may become rigid or dysfunctional over time. This model does not contradict constructivism; rather, it complements it by situating meaning-making within a framework of survival, affiliation, and regulatory success.

The evolutionary logic serves as a background scaffold—a kind of macro-theory—while the constructivist logic operates at the

micro-level of lived experience. In this way, ECF offers a valuable extension of constructivist practice: it preserves the uniqueness of personal worlds while organizing them within a common architecture of human adaptation.

Thematization and Personal Meaning: Parallels With PCP and Narrative Therapy

The process of narrative thematization in ECF closely mirrors the constructivist practice of identifying core constructs, recurrent dilemmas, and anticipatory meanings, as originally laid out by George Kelly and later developed by Robert Neimeyer, David Winter, and others.

Where Kelly used the repertory grid to map bipolar constructs that organize personal experience, ECF uses domain narratives to identify recurrent patterns of dysfunction and regulation. For example, an individual who construes closeness as dangerous (Interpersonal Domain) and time as fragmented (Self System Domain) may exhibit maladaptive regulation strategies that mirror what constructivists would call "transitional constructions" or "disrupted core narratives."

Similarly, in narrative therapy, problems are understood as saturated stories that dominate the client's identity landscape. ECF's identification of dysfunctional themes and interactional cycles shares this logic but offers a more structured pathway to identify where (in which domain) these narratives are rooted and how they affect self-regulation.

In this sense, ECF does not displace constructivist methods; it scaffolds them, offering a language for mapping meaning not just horizontally (across storylines) but vertically (across domains of experience).

Intersubjectivity and Reflexivity

Constructivist therapies are inherently reflexive: they acknowledge the therapist as co-author, the formulation as co-construction, and the process of therapy as a joint exploration of meaning. ECF shares this stance explicitly. The client is not a passive object to be analyzed but an active participant in understanding how their current difficulties make sense in light of past adaptive needs and future existential challenges.

Moreover, the inclusion of Religiosity/Spirituality, Imagination, and Corporeality as full clinical domains reflects an understanding of personhood that is multilayered, experiential, and symbolic—a hallmark of phenomenological-constructivist approaches.

In my own clinical practice and supervision work, these are precisely the areas where traditional models falter. Clients often struggle with meaning-loss, bodily alienation, or spiritual disorientation—concerns that resist reduction to symptom clusters or behavioral patterns. ECF provides a relational map for navigating these existential themes without stripping them of their complexity.

Toward Idiographic, Participatory Formulation

Finally, both ECF and constructivist approaches share a commitment to idiographic formulation—to understanding the individual in context, rather than applying generic templates. Formulation becomes a joint narrative process, grounded in the client's unique experiential language. This idiographic orientation also parallels functional-analytic and individualized approaches to case conceptualization, which emphasize the identification of context-sensitive mechanisms and maintaining processes over categorical diagnosis (Haynes et al. 2009).

Yet one of the recurrent challenges in constructivist therapy has been the lack of shared tools that can make this idiographic process both structured and shareable. Therapists often generate beautiful, richly idiographic formulations—but struggle to communicate them across teams, settings, or research protocols.

This is where ECF and Fuzzy Cognitive Mapping can intersect. In the next section, I will explore how FCMs—as I have developed them—can translate constructivist formulations into dynamic, visual, and participatory maps, offering a computational complement to the narrative structures of ECF.

Together, they point toward a future in which formulation is not just personal and meaningful, but also systematically representable, revisable, and empirically grounded—without losing the relational depth that constructivist therapy demands.

Fuzzy Cognitive Maps as a Possible Complement to the ECF Framework

While *Evolutionary Case Formulation* provides a rich conceptual and clinical framework for understanding psychological suffering through intersubjective domains and adaptive narratives, its practical application can sometimes be demanding in terms of time, training, and representational clarity. In this regard, Fuzzy Cognitive Maps (FCMs)—as developed in clinical settings under the umbrella of constructivist and complexity-informed approaches—offer a complementary methodology that enhances both the visualization and personalization of case formulations.

As has been explored (Botella, 2022; Botella et al., 2022), FCMs allow therapists and clients to collaboratively build causal maps of psychological processes, using concepts (nodes) and causal influences (edges) that can be weighted in degrees. This capacity to represent uncertainty, nuance, and systemic interaction aligns closely with the logic of ECF and offers several points of intersection.

From Domains to Dynamic Conceptual Maps

The ECF model organizes psychological functioning across a set of core domains—Self System (Self-narrative/Coherence, Sense of Agency/Efficacy, Sense of Time/Balance, Self-esteem/Self-deception, and Self-care/Health), Emotion, Cognition, Interpersonal, Imagination, Corporeality, Sexuality, and Religiosity/Spirituality. Within each domain, clinicians identify patterns of meaning, regulation, and dysregulation. However, the model does not prescribe how these domains interact dynamically in a particular person's system.

FCMs can bridge this gap. Each domain can be translated into sets of concepts within a map (e.g., "self-efficacy", "avoidance of intimacy", "anticipation of rejection", "body disconnection", "spiritual disorientation"), and their causal influences can be visually structured, weighted, and revised in collaboration with the client. This dynamic and relational perspective is compatible with network and complexity approaches to psychopathology, which conceptualize psychological suffering as emerging from interacting

systems of mutually reinforcing processes rather than from latent disease entities (Borsboom, 2017).

This translation does not reduce narrative richness; rather, it makes the structure of the narrative explicit. The formulation becomes a living diagram—modifiable as therapy progresses and as insights emerge.

Participatory Co-Construction and Client Agency

One of the most powerful aspects of FCMs is their participatory nature. The client is not a passive recipient of the therapist's formulation but an active cartographer of their own experience. This is entirely in keeping with the ECF ethos, which centers on intersubjective meaning and collaborative exploration.

In my experience supervising clinicians and working with clients, the construction of an FCM facilitates:

a) A shared language for discussing complex patterns without reverting to diagnostic labels.
b) A sense of ownership and authorship on the part of the client.
c) An aesthetic and affective impact: seeing one's psychological world laid out visually can be both confronting and clarifying.

Moreover, FCMs are particularly well-suited for working with metaphoric, imaginal, and existential material, such as that found in the Imagination or Spirituality domains of ECF. Concepts like "the inner judge," "the empty future," or "the ancestral thread of care" can be mapped alongside behavioral or emotional elements, preserving symbolic richness while integrating it into the systemic flow.

Operationalization and Monitoring of Change

One limitation of many narrative or idiographic approaches—including ECF—is the difficulty of monitoring changes over time in a way that is both personalized and structured. FCMs offer a unique advantage here: they can be used to simulate system behavior, track changes in node activation, and compare map states across sessions or phases of therapy.

For example, in a formulation centered around chronic self-silencing and interpersonal fear, a client might build a map showing how "fear of rejection" increases "avoidance of conflict," which decreases "authentic expression," leading to "loss of identity clarity," which in turn increases "emotional exhaustion." This circular feedback loop can be discussed, weighted, and then revised as therapeutic interventions begin to shift the system.

This kind of micro-process tracking aligns perfectly with ECF's regulation axes and narrative restructuring and offers a bridge to outcome research without losing the idiographic core. It transforms formulation from a static narrative to a dynamic tool for shared sense-making and change.

A Shared Platform for Supervision, Research, and Training

Beyond therapy, FCMs provide a common platform for supervisors, researchers, and students to engage with case formulations in a structured yet flexible way. Combined with ECF, they can:

a) Help trainees visualize the flow of clinical material across domains.
b) Allow supervisors to trace the formulation process and identify biases or oversights.
c) Support researchers in studying change trajectories through formal map comparisons.

Importantly, FCMs have already been applied in clinical, organizational, and educational settings to support customized case formulations that retain theoretical openness (Botella, 2024). Integrating them with ECF would not only enhance the model's implementation but also extend its reach across contexts where formulation depth is needed but time and resources are limited.

Future Directions: Toward Hybrid and Dynamic Formulation Models

The future of psychotherapy lies in integrative, personalized, and dynamically adaptive models of practice. In that landscape, both the *Evolutionary Case Formulation* (ECF) and Fuzzy Cognitive Maps (FCMs) represent essential building blocks: the former offering a rich narrative and relational taxonomy of suffering and change; the latter, a computationally assisted method for mapping, simulating, and revising the client's psychological ecology.

Rather than viewing these approaches as alternative or competing, I believe they should be seen as mutually enhancing components of a hybrid formulation platform, capable of meeting the increasing complexity of clinical practice. Such a platform would need to be:

a) *Epistemologically plural:* open to diverse theoretical lenses.
b) *Narratively grounded:* rooted in the client's meaning-making and voice.
c) *Systemically sensitive:* capable of capturing feedback loops and emergent properties.
d) *Operationally transparent:* accessible to therapists, clients, supervisors, and researchers alike.

Conceptual Synergies

ECF and FCMs share a number of foundational assumptions:

a) Both models see psychopathology as patterned, functional, and context-dependent rather than as an expression of internal defect or disorder.
b) Both emphasize the co-construction of formulations, involving the client as an epistemic partner.
c) Both avoid simplistic causal thinking, instead favoring multi-directional, recursive representations of human functioning.
d) Both support ongoing revision of the case conceptualization, treating it as a living system rather than a static diagnosis.

These shared principles create the conditions for integration. In clinical terms, a therapist might first use the ECF protocol to conduct a rich narrative assessment, identifying salient domains and themes, and then collaboratively build a fuzzy cognitive map to model the dynamics between those elements, simulate potential shifts, and design interventions informed by both structure and story.

Examples of Convergent Use

In my clinical and supervisory work with FCMs, I have observed how visual cognitive-affective maps can serve as a mirror of the

narrative formulation, deepening insight and enhancing retention. For instance:

a) A theme identified in ECF as "emotional numbing following repeated interpersonal invalidation" can be unpacked into a causal loop involving "self-silencing," "fear of being a burden," "avoidance of closeness," and "increased loneliness," all of which can be represented in an MCB.
b) Domain-specific information (e.g., from the Imagination domain) such as "lack of future imagery" or "dystopian anticipation" can be explicitly modeled and linked to regulation patterns.
c) Regulatory targets (identified via ECF's axes) can be made visible through FCM simulation: what happens when activation of "self-trust" increases? How does that ripple across the system?

In these cases, FCMs serve not as replacements for narrative or clinical intuition but as cognitive prostheses: they extend our ability to hold complexity, to reflect on implicit assumptions, and to track evolving patterns of meaning and function.

Enhancing Training, Supervision, and Research

This hybrid approach also offers concrete advantages in psychotherapy education. Trainees often struggle with formulating rich, non-reductive conceptualizations of client material. The ECF model, with its domain architecture, gives them a narrative compass; FCMs, with their visual language, offer a cartographic tool. Together, they foster clinical reasoning that is both grounded and generative.

In supervision, maps and narratives can be examined side-by-side, encouraging critical reflection and deepening understanding. And in research, this hybrid platform opens possibilities for qualitative-quantitative integration, such as:

a) Comparing FCMs pre- and post-intervention to track conceptual shifts.
b) Studying domain usage across populations or clinical conditions.
c) Developing scalable training modules based on real ECF-FCM integrations.

A Constructivist Vision of Integrative Formulation

Ultimately, what binds these approaches is not just their technical compatibility but their shared constructivist DNA. They treat the person not as a bearer of symptoms but as an interpreter of experience, an agent of adaptation, and a narrator of their own evolving self. They treat formulation not as an act of classification but as a space of collaborative epistemology, where therapist and client meet as co-theorizers of human life.

In this sense, the combination of ECF and FCMs reflects what I have elsewhere called a "hermeneutics of complexity": a clinical method that honors nuance, invites multiple perspectives, and integrates structure with openness.

This is not only a methodological convergence—it is an ethical one. It expresses a commitment to understanding rather than labeling, to individualization rather than standardization, and to therapy as joint meaning-making rather than prescriptive intervention.

Conclusions

Evolutionary Case Formulation: Developing a Unified Language for the Practice of Psychotherapy is a timely and courageous contribution to the field of psychotherapy. At a moment when clinicians are increasingly called upon to integrate diverse theoretical perspectives, respond to complex forms of suffering, and personalize their interventions in ethically attuned ways, this model offers both a conceptual compass and a clinical map.

Its central achievement lies in providing a unified language of formulation that is rooted in intersubjective meaning-making, grounded in evolutionary principles, and operationalized through a rigorous yet flexible protocol. Rather than erasing the differences between schools of psychotherapy, it builds bridges across them—allowing for dialogue, translation, and mutual enrichment.

The ECF framework succeeds in offering clinicians a plural yet coherent structure, one that honors the narrative texture of human experience while enabling structured reflection, dynamic tracking, and relational depth. It also opens the door to genuine co-construction, placing the client not at the receiving end of a theory but at the center of an evolving explanatory narrative.

In this regard, ECF appears well positioned within broader contemporary shifts toward idiographic, process-based, and complexity-informed models of psychotherapy.

At the same time, this book marks not an endpoint, but a beginning—a foundation upon which other tools, methods, and visions can build. The integration of Fuzzy Cognitive Maps into this landscape, for instance, reflects a growing movement toward personalized, participatory, and systemic approaches to formulation. These developments do not replace models like ECF but rather extend their reach, offering new forms of visualization, simulation, and collaboration.

In this sense, the ECF model can be seen as part of a larger epistemic shift in the field: a turn toward constructivist, narrative, and complexity-informed psychotherapies that emphasize process over pathology, meaning over categorization, and co-creation over prescription. This shift is being carried forward by a new generation of scholars and clinicians who are weaving together theory, practice, and innovation to meet the challenges of a changing world.

To those engaged in psychotherapy—whether as therapists, supervisors, researchers, or students—this book offers not only a set of tools, but a vision: one in which psychological suffering is met with understanding rather than reduction, and in which the formulation of a case becomes a shared act of sense-making rather than an expert decree.

In short, *Evolutionary Case Formulation* is not merely a book about how to conceptualize clinical cases. It is a book about how to listen, how to translate suffering into meaning, and how to do so with humility, coherence, and care.

It deserves to be read widely, taught carefully, and developed further—within and beyond the frame of psychotherapy.

Conflict of Interests

The authors declare no competing interests.

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