

The Hierarchy of Human Change™

An Integrative Nested Framework for Understanding Human Adaptation

Version 1.0

June 2026

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Executive Summary

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An Integrative Systems Framework for Understanding Human Adaptation

For more than a century, psychology, neuroscience, and behavioral science have produced profound insights into how people learn, adapt, recover, and transform. Developmental psychology has expanded our understanding of early experience. Attachment theory has explained the formation of relational expectations. Predictive processing has advanced our understanding of perception and meaning-making. Affective neuroscience has illuminated the relationship between emotion and physiology. Behavioral science has identified the mechanisms of learning, reinforcement, and habit formation. At the same time, therapeutic approaches such as Cognitive Behavioral Therapy (CBT), Acceptance and Commitment Therapy (ACT), Internal Family Systems (IFS), Eye Movement Desensitization and Reprocessing (EMDR), Clinical Hypnosis, and Polyvagal-informed interventions have demonstrated meaningful success by targeting specific aspects of the therapeutic process.

Despite these advances, both research and clinical practice often remain organized around individual theories or therapeutic modalities. Each offers valuable insight into a particular mechanism of adaptation, yet clinicians and researchers are frequently left integrating multiple conceptual models in order to understand how people develop enduring patterns, maintain them over time, and ultimately modify them. While many theories explain specific aspects of human functioning, fewer provide an organizing framework that illustrates how these mechanisms operate together as an integrated adaptive system.

The Hierarchy of Human Change™ was developed to address this need. Rather than introducing a new therapeutic modality or replacing existing theories, it offers an integrative hierarchical systems framework that organizes established scientific principles into a coherent model of human adaptation. The framework is composed of 5 interdependent yet hierarchical levels organized into a continuous adaptive cycle, describing how lived experience becomes interpretation, how interpretation gives rise to emotional and physiological states, how those states influence behavior, and how the results of behavior become new evidence that continually informs future adaptation.

These are the five levels outlined:

1. Experience – Lived experiences provide the foundational information from which adaptation begins.

2. Core Interpretive Framework – Experiences are organized into meaning, beliefs, expectations, identity, predictive models, and protective adaptations that shape how future experiences are understood.
3. Emotional & Physiological States – Interpretations generate coordinated emotional, autonomic, endocrine, neural, and physiological responses that prepare the individual to respond to the perceived environment.
4. Conscious & Auto-Generated Behaviors – Internal adaptive states are expressed through both deliberate and automatic behaviors that regulate, protect, connect, solve problems, and pursue desired outcomes.
5. Results – Behavioral outcomes generate new evidence that either reinforces or contributes to the revision of existing interpretations, initiating the next adaptive cycle.

Although organized as a hierarchy of influence, the framework operates as a continuous adaptive cycle. The results generated through one cycle become the lived experiences that initiate the next, allowing the adaptive system to continually learn, refine its interpretations, and respond to changing environmental conditions over time.

The framework is intended to provide clinicians with a conceptual model for case formulation and treatment planning, researchers with an organizational framework for generating and testing hypotheses, educators with a structured approach to teaching the mechanisms of human adaptation, and individuals with a more comprehensive understanding of why enduring change often requires more than modifying behavior alone.

The original contribution of the Hierarchy of Human Change is not the proposal of new psychological or neuroscientific mechanisms. Rather, it is the organization of established findings from multiple disciplines into a hierarchical systems framework that clarifies how lived experience, interpretation, emotional and physiological regulation, behavior, and environmental feedback function as interdependent components of a continuous adaptive process. By integrating these mechanisms into a single conceptual model, the framework provides a common language through which existing research, therapeutic modalities, and future scientific investigation may be more effectively understood, compared, and integrated.

As an organizational framework, the Hierarchy of Human Change invites continued scientific evaluation, refinement, and empirical investigation. Its purpose is not to compete with established disciplines, but to serve as a bridge between them by providing a comprehensive model for understanding how the major mechanisms of human adaptation interact across time.

Ultimately, the framework is organized around one central question:

How does enduring human adaptation occur?

2. The Problem

Over the past century, the scientific understanding of human behavior has expanded dramatically. Psychology, neuroscience, psychiatry, behavioral economics, developmental science, and related disciplines have each contributed important discoveries about how people perceive the world, regulate emotion, form habits, develop relationships, recover from adversity, and adapt throughout life. These advances have produced a rich body of knowledge that has transformed both research and clinical practice.

At the same time, this expanding knowledge has become increasingly specialized. Individual theories and therapeutic approaches often focus on particular aspects of human functioning, each providing valuable insight into specific mechanisms of adaptation.

For example, behavioral science has significantly advanced our understanding of learning, reinforcement, habit formation, and observable behavior. Developmental psychology and attachment theory have demonstrated how early experiences and relationships influence emotional development and interpersonal functioning across the lifespan. Predictive processing offers a compelling account of how the brain continually generates expectations and interprets incoming information. Affective neuroscience has deepened our understanding of the relationship between emotion, physiology, and neural function, while Polyvagal Theory has contributed an influential framework for understanding autonomic regulation and the body's responses to safety and threat.

Likewise, modern psychotherapy encompasses a wide range of evidence-informed approaches—including Cognitive Behavioral Therapy (CBT), Acceptance and Commitment Therapy (ACT), Eye Movement Desensitization and Reprocessing (EMDR), Internal Family Systems (IFS), Clinical Hypnosis, Somatic Experiencing®, and many others—each designed to influence different aspects of psychological functioning through distinct therapeutic mechanisms.

Collectively, these contributions have greatly expanded our understanding of human adaptation. Yet because they originate from different disciplines, they are often taught, researched, and applied within separate conceptual frameworks. **Clinicians routinely draw from multiple theories during treatment, integrating insights from cognitive psychology, developmental science, neuroscience, behavioral research, and physiology to understand a single client's experience. This integration is common in practice, but less clearly represented in the conceptual models that organize these fields.** As a result, an important question remains:

How do these mechanisms relate to one another within the broader process of human adaptation?

How does lived experience become meaning? How does meaning influence emotional and physiological regulation? How do internal states shape behavior? How do the consequences of behavior become new evidence that either reinforces or modifies future interpretations? While each of these questions has been explored within individual disciplines, they are less often presented as interconnected components of a single adaptive system.

The Hierarchy of Human Change™ was developed to address this conceptual gap. Rather than proposing new psychological mechanisms or replacing established theories, it provides an integrative organizational framework that synthesizes findings across multiple disciplines into a unified model. Its purpose is to clarify how the major processes described by existing research interact continuously—from experience, to interpretation, to emotional and physiological state, to behavior, and ultimately to the environmental feedback that drives ongoing adaptation.

By organizing these mechanisms into a coherent systems framework, the Hierarchy of Human Change seeks to provide a common conceptual language that can support clinical formulation, interdisciplinary communication, education, and future research. Instead of asking clinicians or researchers to choose between competing theories, it offers a structure through which many existing theories can be understood as describing complementary parts of the same adaptive process.

3. Purpose of the Framework

The Hierarchy of Human Change™ was developed as an integrative systems framework for understanding how human adaptation occurs. Its purpose is to organize established scientific principles from psychology, neuroscience, behavioral science, developmental theory, and related disciplines into a coherent model that describes how the major mechanisms of change interact as a continuous adaptive process.

The framework is founded on a simple premise: human change is not the product of a single mechanism. It emerges from the ongoing interaction between lived experience, interpretation, emotional and physiological regulation, behavior, and environmental feedback. While each of these processes has been extensively studied within its respective discipline, they are often examined in relative isolation. The Hierarchy of Human Change seeks to integrate these perspectives into a unified conceptual framework that illustrates how they function together as parts of the same adaptive system.

Within this model, experience provides the raw information from which the nervous system learns. Those experiences are organized into a **Core Interpretive Framework** that shapes perception, expectations, beliefs, identity, and predictive models of the world. These interpretations influence coordinated emotional and physiological states, which in turn constrain and facilitate patterns of conscious and auto-generated behavior. The consequences of those behaviors become new experiences, providing additional evidence that may reinforce, refine, or revise the interpretive framework. Through this continuous feedback loop, adaptation is not viewed as a series of isolated events, but as an ongoing process of learning, prediction, response, and revision.

The framework therefore shifts the focus from asking, *"Which single mechanism causes change?"* to asking, *"How do the major mechanisms of adaptation interact to produce change over time?"* Rather than positioning cognition, physiology, behavior, or lived experience as primary drivers in isolation, the model proposes that each influences and is influenced by the others through an ongoing recursive process.

As an organizational framework, the Hierarchy of Human Change is intended to serve several complementary purposes.

First, it provides **clinicians** with a systems-oriented model for conceptualizing clients beyond symptoms or behaviors alone. By identifying where a particular intervention primarily operates within the adaptive cycle, clinicians may better understand how different therapeutic approaches complement one another and where additional interventions may be beneficial.

Second, it provides **researchers** with a conceptual framework for examining relationships among established mechanisms that are often investigated independently. By organizing these mechanisms into a single model, the framework generates new hypotheses regarding the interaction of experience, interpretation, physiology, behavior, and environmental feedback over time.

Third, it provides **educators and students** with a common language for understanding how diverse psychological theories and therapeutic modalities relate to one another within a broader model of human adaptation. Rather than learning competing theories as separate systems, learners can understand how each contributes to explaining a different aspect of the adaptive process.

Finally, it provides **individuals** with a more comprehensive understanding of personal change. Many people attempt to alter outcomes by focusing exclusively on behavior, yet behavior represents only one expression of a larger adaptive system. Recognizing the interaction among experience, interpretation, physiology, behavior, and results offers a more complete perspective on why change can be difficult to sustain and why durable transformation often involves coordinated changes across multiple levels of the system.

The Hierarchy of Human Change does not seek to replace existing theories or therapeutic modalities. Instead, it proposes that many established approaches can be understood as targeting different aspects of the same adaptive process. Its purpose is to provide an integrative conceptual map that clarifies these relationships, supports interdisciplinary communication, and encourages continued scientific investigation into the mechanisms through which human adaptation occurs.

The Hierarchy of Human Change is a systems framework designed to organize the major mechanisms of lasting human change into a single, coherent model that explains how lived experience becomes interpretation, how interpretation generates emotional and physiological states, how those states influence behavior, and how behavioral results become new evidence that continually reshapes the system.

The central proposition of the Hierarchy of Human Change is that enduring psychological adaptation is best understood not as the product of any single mechanism, but as the emergent property of a continuous interaction among experience, interpretation, emotional and physiological regulation, behavior, and environmental feedback.

4. Foundational Principles

The Hierarchy of Human Change™ is built upon six guiding principles that describe the adaptive processes underlying human behavior and psychological development. These principles are not intended to replace established scientific theories. Rather, they express the foundational assumptions upon which the framework is organized and provide the conceptual lens through which the interactions among its five tiers are understood.

Together, these principles describe human adaptation as a continuous, recursive process in which experience, interpretation, physiology, behavior, and environmental feedback continually influence one another over time.

Principle 1: Experience Precedes Interpretation

All adaptive change begins with experience. Before the nervous system can assign meaning, regulate emotion, or initiate behavior, it must first encounter information from either the external environment or the internal experience of the individual. Experiences provide the evidence from which the nervous system learns, predicts, and adapts.

Within this framework, experience is understood as the starting point of every adaptive cycle.

Principle 2: Interpretation Shapes Emotional and Physiological State

Experiences alone do not determine an individual's response. Rather, the meanings assigned to those experiences through the Core Interpretive Framework influence coordinated emotional, autonomic, endocrine, and physiological processes that prepare the individual to respond to the perceived environment.

Different interpretations of similar experiences may therefore produce substantially different emotional and physiological states.

Principle 3: Emotional and Physiological State Influences Behavioral Possibilities

Behavior does not emerge independently of internal state. The emotional and physiological condition of the individual influences attention, perception, decision-making, cognitive flexibility, motivation, and the range of behaviors that are available or likely in a given moment.

Within the framework, behavior is understood as an expression of the individual's current adaptive state rather than as an isolated event.

Principle 4: Behavior Produces Environmental Feedback

Every behavior generates consequences. Some consequences reinforce existing adaptive patterns, while others introduce new information that challenges them. Regardless of whether outcomes are perceived as successful or unsuccessful, behavior continually produces feedback from the environment.

This feedback provides additional evidence from which future adaptation occurs.

Principle 5: Results Become New Experience

Behavioral outcomes do not represent the conclusion of the adaptive process. Instead, they become new lived experiences that re-enter the system and are interpreted through the individual's existing Core Interpretive Framework. In this way, adaptation is recursive rather than linear, with each cycle influencing the next.

The framework therefore views results not as endpoints, but as the beginning of subsequent cycles of learning and adaptation.

Principle 6: Enduring Change Emerges Through Systemic Change

Because experience, interpretation, emotional and physiological regulation, behavior, and environmental feedback function as an interconnected system, lasting psychological adaptation is rarely achieved by modifying isolated outputs alone. Changes at one level may influence the system temporarily, but more durable transformation is often associated with changes that alter the relationships among multiple components of the adaptive process.

The Hierarchy of Human Change therefore emphasizes understanding both the individual mechanisms of adaptation and the dynamic interactions among them.

Collectively, these guiding principles establish the conceptual foundation of the Hierarchy of Human Change. They describe adaptation not as a sequence of disconnected events, but as a continuous system in which each component both influences and is influenced by the others. The five-tier model presented in the following section provides the structural organization through which these principles are expressed.

I think these become the axioms we discussed.

For example:

1. Experience precedes interpretation.
2. Interpretation determines emotional and physiological state.
3. State shapes behavioral possibilities.
4. Behavior creates measurable results.

5. Results become new lived experience.
 6. Lasting change occurs by changing the system rather than isolated outputs.
-

5. The Five-Tier Model

The Hierarchy of Human Change proposes that the five levels of adaptation are interdependent, but not equal in their long-term influence on sustained system change. The Core Interpretive Framework (Level 2) functions as a particularly influential organizing node within the adaptive cycle because it contains the previously established automatic and subconscious processes through which experiences are filtered. When it remains unchanged, gains at Levels 3 and 4 often require ongoing management or prove temporary. When Level 2 is accessible and is revised in a way that is meaningful and embodied, the effects commonly cascade forward: emotional and physiological states become more flexible (Level 3), a wider range of behaviors becomes available (Level 4), and the results that return as new experience (Level 5) begin to differ.

Work at Level 3 also carries important cascading effects. Successful regulation of emotional and physiological states expands the behavioral possibilities available at Level 4, which in turn generates new results. These new results are then embodied as fresh experiences that can carry more positive or updated meanings, thereby increasing the system's capacity to engage more deeply with Level 2 material. In this way, physiological stabilization does not merely manage symptoms; it creates the conditions under which interpretive revision becomes more possible.

Likewise, working effectively at Level 4 when appropriate as an entry point can produce relatively rapid new results that begin to reinforce updated beliefs about the self and the world while weakening older, less adaptive ones. These new behavioral outcomes supply concrete evidence that can support further revision at Level 2. Working with Level 5 (the deliberate use of feedback, outcome tracking, and real-world results) helps make these new patterns visible and stable, turning successful experiences into lasting evidence that the adaptive system can continue to draw upon.

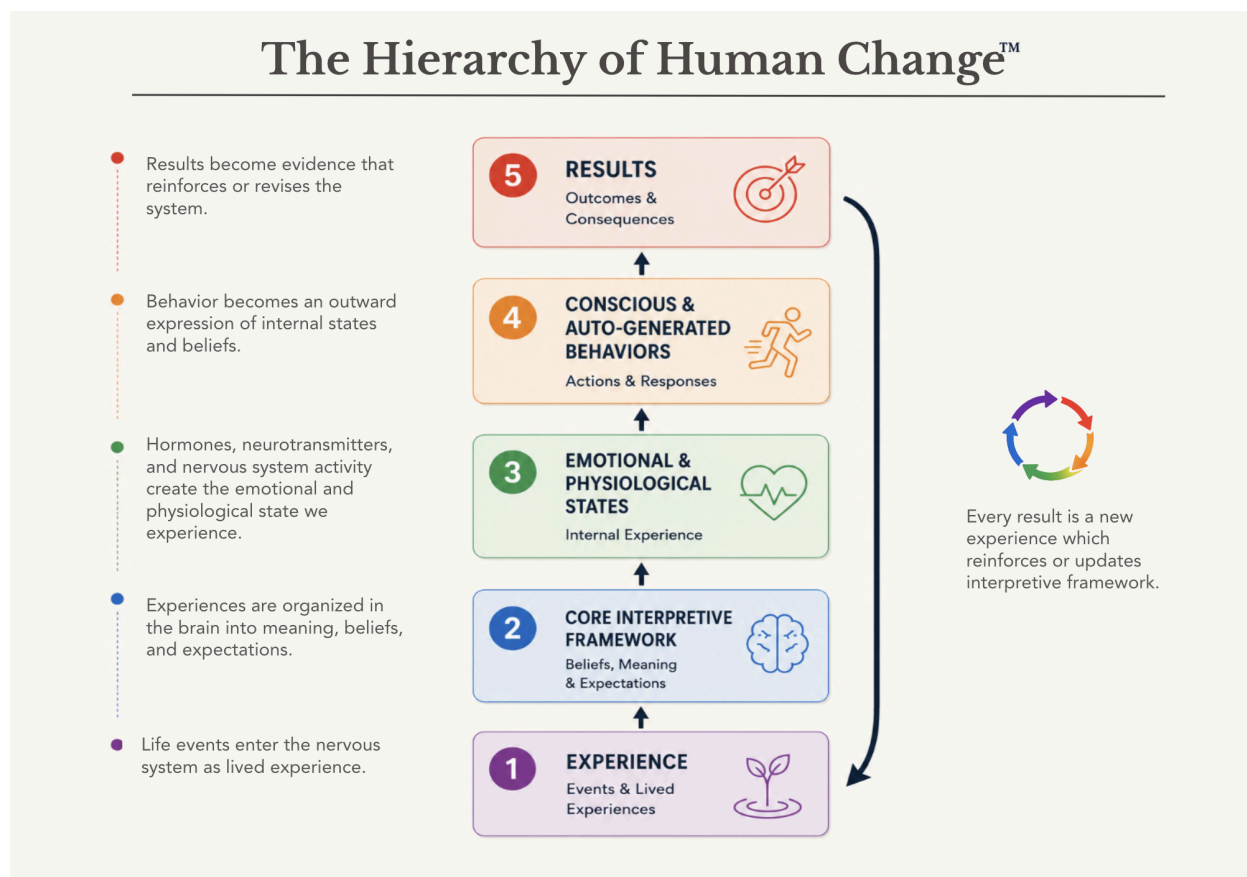
These forward cascades matter because they change the quality of new experience itself. As states regulate and behaviors shift, individuals begin encountering different interpersonal responses, different internal outcomes, and different environmental feedback. These new

experiences then re-enter the adaptive cycle and become available for encoding with revised meanings. Over repeated cycles, this process allows the interpretive framework to update in response to lived evidence rather than remaining locked to earlier patterns.

The framework therefore does not treat any single level as the only valid entry point. Accessibility, safety, and clinical judgment determine where work begins. It does, however, describe a consistent clinical pattern: long-term reorganization of the adaptive system is most likely when changes at Level 2 succeed in altering the experiences that subsequently feed back into the cycle, allowing new meanings to be formed and stabilized, and when changes at Level 3 become sufficiently reliable that individuals can begin to influence their own physiological state with greater consistency and agency.

Table 1

Illustration: The Hierarchy of Human Change



Tier 1: Experience

Definition

Experience refers to the continuous stream of internal and external events encountered by the nervous system. It represents the raw information from which adaptation begins and includes sensory input, interpersonal interactions, environmental conditions, bodily sensations, emotional experiences, thoughts, memories, and significant life events. Within the Hierarchy of Human Change, experience is not interpreted reality—it is the evidence available for interpretation.

Purpose

The purpose of Experience is to provide the nervous system with the information necessary for learning and adaptation. Every adaptive process begins with contact between the individual and their internal or external environment.

Without experience, there is no information from which meaning can be constructed, predictions refined, or behavior modified.

Primary Function

Experience supplies the evidence upon which the adaptive system operates. It is the source material from which the nervous system develops increasingly sophisticated predictions about the world, other people, and the self.

Although experience is registered through the body, Tier 1 should not be confused with the emotional and physiological states described in Tier 3. At this level, the nervous system is detecting and receiving information from both the external world and the internal body. These sensory and physiological registration processes provide the raw material from which meaning is later constructed. Tier 3 represents something fundamentally different: the coordinated emotional and physiological state that emerges after the Core Interpretive Framework has interpreted what the experience means.

Scientific Foundations

The Experience tier draws upon several established scientific disciplines, including:

- Developmental Psychology
- Learning Theory
- Ecological Psychology
- Sensory Neuroscience
- Embodied Cognition
- Attachment Theory
- Trauma Research
- Environmental Psychology

Collectively, these fields demonstrate that adaptation is fundamentally dependent upon interaction between the individual and their environment across development.

Major Components

Experience encompasses both **external** and **internal** sources of information.

External experiences include:

- relationships
- family dynamics
- culture
- education
- trauma
- success
- failure
- social interaction
- environmental conditions

Internal experiences include:

- bodily sensations
- interoception
- pain
- illness
- emotional awareness
- imagination
- memory recall
- physiological changes

The framework recognizes that both categories provide evidence that contributes to future adaptation.

Clinical Implications

Clinically, the Experience tier emphasizes that psychological adaptation cannot be understood independently of an individual's lived history or current environment.

Many therapeutic approaches intentionally create new corrective experiences through:

- therapeutic relationships
- behavioral experiments
- exposure
- mastery experiences
- social connection
- skill acquisition

Rather than merely discussing change, these interventions provide new evidence capable of influencing future adaptation.

Representative Methodologies

Examples of interventions that primarily engage this tier include:

- Exposure Therapy
- Behavioral Experiments
- Experiential Therapy
- Adventure Therapy
- Group Therapy
- Family Therapy
- Corrective Relational Experiences
- Skills Training
- Environmental Modification

While these approaches influence other tiers as well, their primary contribution lies in creating or restructuring lived experience.

Relationship to Other Tiers

Experience serves as the foundation of the adaptive cycle but does not determine adaptation independently.

The same experience may produce very different outcomes depending upon the individual's existing Core Interpretive Framework. Likewise, behavioral results generated later in the cycle become new experiences, illustrating that Experience functions as both the beginning and continuation of the adaptive process.

Transition to Tier 2

Experience alone does not determine behavior.

Before experience can influence emotion, physiology, or action, it must first be organized into meaning. The nervous system continually interprets incoming information through previously developed patterns of expectation, belief, identity, and prediction.

This process gives rise to the **Core Interpretive Framework**, the second tier of the Hierarchy of Human Change.

Tier 2: Core Interpretive Framework

Definition

The **Core Interpretive Framework** is the nervous system's internal model for understanding and responding to experience. It is the integrated system through which lived experiences are organized into meaning, expectations, beliefs, identity, predictive models, and protective adaptations. Rather than functioning as a collection of independent psychological constructs, these elements operate together to influence how individuals perceive themselves, others, and the world around them.

Within the Hierarchy of Human Change™, the Core Interpretive Framework serves as the central organizing system of human adaptation. It continually interprets incoming experiences through previously established patterns while simultaneously updating those patterns in response to new evidence. In this way, it functions as both a repository of past learning and an active predictive model that shapes future perception.

The framework does not propose that individuals respond directly to objective reality. Rather, it proposes that responses are mediated by the meanings assigned to experience through this continually evolving interpretive system.

Purpose

The purpose of the Core Interpretive Framework is to create coherence from experience.

The nervous system is constantly exposed to an overwhelming volume of sensory, emotional, interpersonal, and environmental information. Efficient adaptation requires more than simply storing these experiences; it requires organizing them into patterns that allow the individual to anticipate what experiences mean, what outcomes are likely, and how to respond.

The Core Interpretive Framework fulfills this adaptive function by reducing uncertainty. It enables rapid interpretation of present circumstances using prior learning, allowing individuals to navigate their environment without consciously analyzing every new experience from first principles.

Although this process is highly adaptive, it also means that interpretations developed under one set of conditions may continue influencing perception long after those conditions have changed.

Primary Function

The primary function of the Core Interpretive Framework is to generate meaning and prediction.

Rather than passively recording experience, the nervous system continuously compares incoming information against existing internal models. These comparisons influence what information receives attention, how situations are interpreted, what emotional and physiological responses are initiated, and which behavioral strategies appear most appropriate.

Because interpretation precedes emotional and physiological regulation within this framework, the Core Interpretive Framework serves as the principal organizer of the adaptive process.

Scientific Foundations

The Core Interpretive Framework integrates findings from multiple scientific disciplines, including:

- Predictive Processing
- Cognitive Psychology
- Schema Theory
- Developmental Psychology
- Attachment Theory
- Learning Theory
- Memory Research
- Social Cognition
- Identity Development
- Constructivist Psychology
- Clinical Hypnosis
- Neuroscience of Perception

Collectively, these disciplines demonstrate that human perception is not simply a passive reflection of external reality. Instead, the nervous system actively constructs interpretations based upon prior experience, expectations, memory, and learned patterns of meaning.

The Hierarchy of Human Change does not seek to replace these perspectives but to organize them within a broader adaptive framework.

Major Components

The Core Interpretive Framework consists of multiple interacting elements that collectively shape interpretation.

These include:

Beliefs

Generalized conclusions about oneself, other people, and the world.

Examples include beliefs regarding safety, competence, trust, worthiness, predictability, and personal agency.

Schemas

Organized cognitive structures that influence perception, memory, and interpretation by providing mental templates through which new experiences are understood.

Identity

The ongoing narrative through which individuals understand who they are, what roles they occupy, what they are capable of becoming, and how they fit within their social environment.

Expectations

Anticipated outcomes generated from previous experience that guide attention, prediction, and decision-making.

Predictive Models

The nervous system's continually updated expectations regarding future events based upon accumulated experience.

Rather than waiting for experience to occur before generating a response, the nervous system continually predicts what is likely to happen and prepares accordingly.

Associative Learning

Connections formed through repeated experience that link situations, emotions, physiological responses, and behavioral strategies.

Protective Adaptations

Patterns developed to reduce perceived threat, emotional pain, or uncertainty.

These adaptations often begin as functional responses to specific developmental or environmental circumstances but may persist long after those circumstances have changed.

Examples include:

- perfectionism
- hypervigilance
- avoidance
- emotional suppression
- people-pleasing

- excessive self-reliance
- dissociation
- compulsive control
- reassurance seeking

Within this framework, these patterns are understood as adaptive solutions rather than inherent pathology.

Clinical Implications

The Core Interpretive Framework has profound implications for psychological treatment because interventions aimed solely at observable behavior may leave the underlying interpretive system largely unchanged.

When longstanding beliefs, expectations, or protective adaptations remain intact, new behaviors may feel inconsistent with the individual's internal model of reality. This mismatch can contribute to relapse, resistance, or difficulty maintaining change despite insight and motivation.

Conversely, interventions that facilitate meaningful revision of the Core Interpretive Framework may influence not only cognition but also emotional regulation, physiological responses, behavioral flexibility, and future adaptation.

Importantly, this framework does not suggest that every intervention must directly target interpretation. Experiences, physiological regulation, and behavioral outcomes may also contribute to gradual revision of the interpretive framework by providing new evidence that challenges existing expectations.

Representative Methodologies

Many evidence-informed interventions influence the Core Interpretive Framework, including:

- Cognitive Behavioral Therapy (CBT)
- Clinical Hypnosis
- Eye Movement Desensitization and Reprocessing (EMDR)
- Internal Family Systems (IFS)
- Schema Therapy
- Cognitive Processing Therapy (CPT)
- Acceptance and Commitment Therapy (ACT)
- Narrative Therapy
- Attachment-Based Therapies

- Compassion-Focused Therapy

Although each operates through different mechanisms, all may contribute to revising aspects of meaning-making, expectation, identity, or predictive modeling.

Relationship to Other Tiers

The Core Interpretive Framework occupies a central position within the Hierarchy of Human Change.

It is continuously shaped by lived experience while simultaneously influencing emotional and physiological regulation, behavioral responses, and the interpretation of future outcomes.

This reciprocal relationship makes it both remarkably stable and remarkably adaptable. Stable because established interpretations guide future perception, and adaptable because sufficiently meaningful experiences can gradually reorganize those interpretations over time.

The framework therefore views interpretation not as a fixed collection of beliefs but as a dynamic adaptive system undergoing continual revision throughout life.

Transition to Tier 3

Interpretation of cognitive events changes the condition from which we think, feel, and act.

The meanings assigned to experience influence coordinated patterns of neural activity, autonomic regulation, endocrine signaling, immune function, and emotional experience. In other words, interpretation becomes embodied.

The nervous system prepares the individual to respond not only to the environment itself, but to the environment as it has been interpreted. Through this process, meaning is translated into an integrated emotional and physiological state that influences attention, perception, motivation, and readiness for action.

This adaptive shift gives rise to the third tier of the Hierarchy of Human Change: **Emotional & Physiological States**.

Tier 3: Emotional & Physiological States

Definition

Emotional & Physiological States refer to the integrated psychophysiological condition that emerges from the nervous system's interpretation of lived experience. These states encompass coordinated patterns of emotional experience, autonomic nervous system activity, endocrine signaling, neural activation, immune function, muscle tone, respiration, cardiovascular regulation, posture, facial expression, and other physiological processes that collectively prepare the individual to respond to the perceived environment.

Within the Hierarchy of Human Change™, emotions are not viewed as isolated psychological events, nor physiology as merely a biological background process. Rather, they are understood as interconnected expressions of a unified adaptive state. Together, they represent the body's moment-to-moment preparation for interaction with the world as it has been interpreted through the Core Interpretive Framework.

Purpose

The purpose of Emotional & Physiological States is to prepare the individual for adaptive action.

Once experience has been interpreted, the nervous system must determine how the body should respond. This preparation extends beyond subjective emotional experience to include widespread physiological adjustments that influence perception, attention, energy allocation, motivation, and readiness for action.

These coordinated changes enable rapid adaptation to perceived opportunities and threats without requiring conscious deliberation before every response.

Primary Function

The primary function of this tier is to translate interpretation into embodied readiness.

Interpretation alone does not produce behavior. Instead, the meanings assigned to experience initiate coordinated changes throughout the nervous system and body that influence what behaviors become available, likely, or adaptive in a given context.

Within the Hierarchy of Human Change, emotional and physiological states represent the bridge between meaning and action. They transform interpretation into an embodied condition that shapes how individuals perceive, think, feel, and respond.

Scientific Foundations

The Emotional & Physiological States tier draws upon research from multiple scientific disciplines, including:

Affective Neuroscience, Psychophysiology, Autonomic Neuroscience, Polyvagal Theory, Neuroendocrinology, Psychoneuroimmunology, Interoception Research, Emotion Science, Stress Physiology, Behavioral Neuroscience, Embodied Cognition, and the growing literatures on gut–brain interaction, inflammatory signaling, and sensorimotor integration.

Collectively, these disciplines demonstrate that emotional experience is inseparable from physiological regulation. Changes in autonomic activity, hormonal signaling, neural activation, cardiovascular function, respiration, immune activity, interoceptive awareness, and musculoskeletal patterning occur in coordinated ways that influence cognition and behavior. The Hierarchy of Human Change integrates these findings by viewing emotional and physiological regulation as a single adaptive system that links interpretation with behavioral readiness.

Pharmacological interventions that alter mood, arousal, or autonomic regulation (e.g., antidepressants, anxiolytics, and related agents) operate primarily at this tier by directly influencing neurochemical, endocrine, and physiological systems. Likewise, many body-based and manual therapies used by functional medicine physicians, chiropractors, acupuncturists, osteopaths, and physical therapists—such as spinal manipulation, acupuncture, targeted movement rehabilitation, and lifestyle or nutritional protocols aimed at reducing systemic inflammation or improving interoceptive regulation—also enter the adaptive system most directly at the level of Emotional & Physiological States.

These interventions can create greater physiological accessibility and reduce the intensity of states that previously constrained cognitive flexibility, behavioral choice, or the capacity to integrate new experience. Because the Hierarchy views Level 3 as both a product of the Core Interpretive Framework and an active influence on subsequent behavior and results, pharmacological and physical interventions are understood as legitimate and often necessary entry points rather than as competitors to meaning-level or behavioral

work. When they successfully shift physiological state, they frequently increase readiness for revision at Level 2 and more flexible action at Level 4.

Major Components

Although highly integrated, Emotional & Physiological States include several interrelated components.

Emotional Experience

Subjective emotional experiences such as fear, sadness, joy, anger, shame, guilt, curiosity, compassion, and hope provide conscious awareness of the individual's adaptive state.

Autonomic Regulation

Dynamic regulation of sympathetic and parasympathetic nervous system activity influences arousal, vigilance, recovery, social engagement, and defensive responding.

Neurochemical Activity

Interpretation influences coordinated patterns of neurotransmitter release and neural signaling that affect motivation, reward processing, attention, learning, emotional regulation, and cognitive flexibility.

Endocrine Responses

Hormonal systems contribute to longer-duration physiological adjustments involving stress regulation, metabolism, energy allocation, reproduction, and recovery.

Interoception

The nervous system continuously monitors signals originating within the body, including heart rate, respiration, muscle tension, visceral sensations, pain, and internal physiological changes. These signals contribute to both emotional awareness and ongoing regulation.

Musculoskeletal Expression

Adaptive states influence posture, facial expression, vocal tone, muscle tension, movement patterns, and nonverbal communication, all of which both reflect and reinforce the individual's current state.

Immune and Inflammatory Processes

Growing evidence suggests bidirectional relationships between psychological states, immune function, and inflammatory processes. While these mechanisms remain an active area of research, they illustrate the broad physiological integration involved in human adaptation.

Clinical Implications

This tier highlights that psychological change is not solely cognitive or behavioral; it is also biological.

Clients often report that they intellectually understand a situation while their bodies continue responding as though previous threats remain present. This distinction underscores the importance of addressing physiological regulation alongside cognitive insight.

Interventions that influence breathing, autonomic regulation, movement, relaxation, interoceptive awareness, emotional processing, or stress physiology may alter the individual's adaptive state even when underlying interpretations are only beginning to change. Likewise, meaningful shifts in interpretation may produce measurable physiological changes that support greater emotional flexibility and behavioral choice.

Pharmacological interventions that alter mood, arousal, or autonomic regulation (for example, antidepressants, anxiolytics, and related agents) operate primarily at this tier by directly influencing neurochemical, endocrine, and physiological systems. In parallel, many body-based and manual therapies—including acupuncture, spinal manipulation, osteopathic and chiropractic care, targeted movement rehabilitation, and functional or lifestyle medicine protocols aimed at reducing systemic inflammation or improving interoceptive regulation—also enter the adaptive system most directly at the level of Emotional & Physiological States.

These interventions can create greater physiological accessibility and reduce the intensity of states that previously constrained cognitive flexibility, behavioral choice, or the capacity to integrate new experience. Because the Hierarchy views Level 3 as both a product of the Core

Interpretive Framework and an active influence on subsequent behavior and results, pharmacological and physical interventions are understood as legitimate and often necessary entry points rather than as competitors to meaning-level or behavioral work. When they successfully shift physiological state, they frequently increase readiness for revision at Level 2 and more flexible action at Level 4.

The framework therefore emphasizes that emotional and physiological regulation should not be viewed as separate treatment targets, but as interconnected expressions of the same adaptive process. It also provides a shared conceptual language through which physicians, functional medicine practitioners, chiropractors, acupuncturists, and other body-based clinicians can collaborate with practitioners working primarily at other hierarchical levels.

Representative Methodologies

Numerous evidence-informed interventions primarily influence this tier, including:

- Breathwork
- Mindfulness-Based Interventions
- Somatic Experiencing®
- Progressive Muscle Relaxation
- Biofeedback and Heart Rate Variability (HRV) Training
- Polyvagal-informed Interventions
- Trauma-Informed Yoga and broader movement-based therapies (including Tai Chi and Qigong)
- Exercise and Movement-Based Therapies
- Relaxation Training
- Emotion-Focused Therapy (EFT)
- Clinical Hypnosis (when focused on physiological settling and regulation)
- Pharmacotherapy targeting mood, arousal, or autonomic function
- Acupuncture
- Spinal manipulative therapy, osteopathic, and chiropractic care
- Sensorimotor and body-oriented approaches
- Functional and lifestyle medicine interventions that modify inflammatory, metabolic, or interoceptive conditions

Although these approaches differ substantially in technique, each seeks to influence aspects of emotional or physiological regulation that contribute to broader adaptive functioning.

Relationship to Other Tiers

Emotional & Physiological States occupy the dynamic interface between interpretation and behavior.

They arise from the meanings assigned through the Core Interpretive Framework while simultaneously influencing attention, perception, memory retrieval, cognitive flexibility, motivation, and behavioral readiness. These states are therefore both products of interpretation and active participants in shaping how subsequent experiences are processed.

As behavior generates new experiences, ongoing physiological regulation may likewise contribute to the gradual revision of future interpretations, illustrating the reciprocal nature of the adaptive cycle.

Transition to Tier 4

Emotional and physiological regulation prepares the individual for action, but preparation alone does not complete the adaptive process.

The body's current state influences which behaviors feel possible, safe, rewarding, or necessary. Some responses emerge through deliberate choice and conscious intention, while others occur rapidly through learned habits, automatic protective strategies, or conditioned patterns developed through previous adaptation.

In this way, the individual's internal state becomes expressed through behavior.

The fourth tier of the Hierarchy of Human Change, **Conscious & Auto-Generated Behaviors**, examines how adaptive states are translated into observable actions that influence both the individual and the environment.

Tier 4

Conscious & Auto-Generated Behaviors

Definition

Conscious & Auto-Generated Behaviors are the observable cognitive, emotional, verbal, and physical responses that emerge from an individual's current emotional and physiological state. These behaviors include both deliberate actions directed by conscious intention and automatic patterns that arise through habit, conditioning, procedural learning, or protective adaptation.

Within the Hierarchy of Human Change™, behavior is understood as the outward expression of the adaptive system rather than an isolated event. Every behavior reflects the interaction of prior experience, interpretation, and the individual's current psychophysiological state.

Behavior therefore serves as the primary interface between the individual and the external world, translating internal adaptation into observable action.

Purpose

The purpose of behavior is adaptation.

Behavior allows individuals to pursue desired outcomes, respond to environmental demands, regulate internal states, strengthen social bonds, avoid perceived threats, solve problems, and increase the likelihood of survival and well-being.

Within this framework, behavior is not viewed solely as goal-directed action. Many behaviors function primarily to regulate discomfort, reduce uncertainty, restore perceived safety, or maintain psychological consistency with an individual's existing interpretive framework.

Primary Function

The primary function of behavior is to express the individual's current adaptive state while generating new interactions with the environment.

Through behavior, individuals test predictions, seek information, pursue rewards, avoid danger, regulate emotional experience, and influence their surroundings.

Every behavior also creates consequences that become new information within the adaptive system, allowing future learning to occur.

Scientific Foundations

The Conscious & Auto-Generated Behaviors tier integrates findings from numerous scientific disciplines, including:

- Behavioral Psychology
- Learning Theory
- Operant and Classical Conditioning
- Habit Formation Research
- Cognitive Psychology
- Executive Function Research
- Decision Science
- Motivation Science
- Self-Regulation Research
- Social Psychology
- Motor Learning

Together, these disciplines demonstrate that behavior arises through the interaction of conscious decision-making, automatic learning, environmental contingencies, emotional regulation, and physiological readiness.

The Hierarchy of Human Change organizes these findings within a broader adaptive framework by viewing behavior as the expression of multiple interacting systems rather than a purely voluntary choice.

Major Components

Although behavior is often discussed as a single construct, it encompasses several distinct forms of adaptive expression.

Deliberate Behavior

Actions performed through conscious awareness and intentional decision-making.

Examples include:

- problem solving
- planning
- communication
- practicing new skills
- setting boundaries
- pursuing goals

Automatic Behavior

Responses that occur with minimal conscious awareness due to repeated learning, conditioning, or procedural memory.

Examples include:

- habits
 - routines
 - conditioned responses
 - automatic avoidance
 - ingrained social behaviors
-

Protective Behavior

Behavioral strategies developed to reduce perceived threat, emotional pain, or uncertainty.

Examples include:

- avoidance
- perfectionism
- reassurance seeking
- emotional withdrawal
- compulsive control
- people-pleasing
- hypervigilance
- procrastination

Within this framework, these behaviors are understood as adaptive attempts to regulate internal experience rather than evidence of personal weakness or dysfunction.

Regulatory Behavior

Behaviors intended to influence emotional or physiological state.

Examples include:

- exercise
- deep breathing
- meditation
- seeking social connection

- substance use
- distraction
- self-soothing
- sleep
- emotional expression

Some regulatory behaviors promote long-term adaptation, while others provide short-term relief at the expense of future flexibility.

Cognitive Behavior

Not all behavior is externally observable.

Patterns such as:

- rumination
- worry
- mental rehearsal
- fantasy
- self-criticism
- internal problem solving

are also behaviors because they represent active responses performed by the nervous system.

These internal behaviors often influence emotional regulation just as strongly as overt physical actions.

Clinical Implications

Understanding behavior as an expression of the adaptive system has important implications for treatment.

Observable behavior is often the most visible aspect of psychological functioning and therefore becomes the primary target of intervention. However, behaviors frequently persist because they continue to serve adaptive functions within the individual's current interpretive framework and emotional or physiological state.

Attempts to eliminate behavior without understanding the function it serves may reduce symptoms temporarily while leaving the underlying adaptive process intact.

Conversely, interventions that address interpretation, emotional regulation, or lived experience may naturally alter behavioral patterns because the conditions that previously made those behaviors adaptive have changed.

This perspective encourages clinicians to ask not only **"What behavior is occurring?"** but also **"What adaptive purpose does this behavior currently serve?"**

Representative Methodologies

Numerous therapeutic approaches primarily influence this tier, including:

- Behavioral Activation
- Exposure-Based Interventions
- Habit Reversal Training
- Acceptance and Commitment Therapy (ACT)
- Motivational Interviewing
- Skills Training
- Executive Function Coaching
- Dialectical Behavior Therapy (DBT)
- Contingency Management
- Behavioral Self-Monitoring

Although these interventions differ substantially in technique, each seeks to influence patterns of behavior that contribute to future adaptation.

Relationship to Other Tiers

Behavior represents the observable expression of the adaptive system while simultaneously shaping its future development.

Behavior emerges from lived experience, interpretation, and emotional and physiological regulation. At the same time, every behavior creates consequences that become new experiences, providing additional evidence that may reinforce or modify the Core Interpretive Framework.

Behavior is therefore neither the beginning nor the end of adaptation. It is the mechanism through which the adaptive system interacts with the environment and continuously reshapes itself.

Transition to Tier 5

No behavior exists in isolation.

Every action, whether deliberate or automatic, produces consequences within the environment. These consequences provide feedback regarding the accuracy of the nervous system's predictions and the effectiveness of its behavioral strategies.

Some outcomes reinforce existing patterns by confirming prior expectations. Others introduce discrepancies that challenge established interpretations and create opportunities for learning and revision.

The adaptive significance of behavior is therefore found not only in the action itself but also in the results it generates.

This leads to the fifth and final tier of the Hierarchy of Human Change: **Results**.

Behavior is often less about achieving a goal than regulating a state.

Tier 5

Results

Definition

Results are the measurable consequences produced through the interaction between behavior and the environment. They include both immediate and long-term outcomes arising from an individual's actions, decisions, relationships, and interactions with the world.

Within the Hierarchy of Human Change™, results are not viewed as final destinations or isolated outcomes. Rather, they constitute new evidence that is encountered by the nervous system and subsequently re-enters the adaptive process as lived experience. In this way, results serve as the critical feedback mechanism through which the adaptive system continually evaluates, reinforces, and revises itself.

Purpose

The purpose of Results is to provide feedback.

Every behavior generates consequences. Some confirm existing expectations, while others challenge them. Whether outcomes are perceived as successful, disappointing, rewarding, or painful, they provide the nervous system with additional information about the effectiveness of its current adaptive strategies.

Without environmental feedback, there would be no mechanism through which learning, refinement, or adaptation could occur.

Primary Function

The primary function of Results is to generate evidence.

Behavior alone does not alter the adaptive system. Instead, the consequences of behavior provide the evidence that the nervous system uses to evaluate existing interpretations and predictions.

When outcomes consistently align with expectations, existing patterns may be strengthened. When outcomes differ from expectations, opportunities arise for revision of the Core Interpretive Framework, provided the new evidence is meaningfully processed and integrated.

Results therefore function as the bridge between one adaptive cycle and the next.

Scientific Foundations

The Results tier integrates principles from several established scientific disciplines, including:

- Learning Theory
- Operant Conditioning
- Reinforcement Learning
- Predictive Processing
- Error-Based Learning
- Behavioral Psychology
- Developmental Psychology
- Decision Science
- Systems Theory
- Cybernetics

Collectively, these disciplines demonstrate that adaptation depends upon continuous feedback between the individual and the environment. Learning occurs not simply because behavior is performed, but because the consequences of behavior provide information that either reinforces or modifies future expectations.

The Hierarchy of Human Change organizes these findings by positioning results as the feedback mechanism that closes one adaptive cycle while simultaneously initiating the next.

Major Components

Results encompass a broad range of consequences that provide evidence for future adaptation.

Environmental Outcomes

Observable consequences that occur within the external world.

Examples include:

- success
 - failure
 - achievement
 - financial outcomes
 - relationship changes
 - academic performance
 - career advancement
 - health outcomes
 - social responses
-

Interpersonal Feedback

Responses received from other people.

Examples include:

- acceptance
- rejection
- praise
- criticism
- affection
- conflict

- trust
- betrayal

These outcomes often become highly influential experiences because of their emotional significance.

Internal Outcomes

Not all results occur externally.

Individuals also experience internal consequences such as:

- satisfaction
- regret
- confidence
- disappointment
- relief
- shame
- fulfillment
- increased self-efficacy

These internal experiences become part of the evidence entering the next adaptive cycle.

Prediction Confirmation

Results sometimes confirm existing expectations.

When repeated over time, confirmation may strengthen existing beliefs, expectations, and protective adaptations, increasing the stability of the current Core Interpretive Framework.

Prediction Disconfirmation

Results sometimes contradict existing expectations.

When sufficiently meaningful and integrated, these discrepancies may contribute to revision of previously established interpretations, opening opportunities for new patterns of adaptation.

Clinical Implications

The Results tier highlights that meaningful psychological change is evaluated not solely by symptom reduction but by the individual's changing interaction with the world.

As individuals develop new interpretations, emotional regulation, and behavioral flexibility, the consequences they experience often begin to change as well. These new outcomes provide corrective evidence that may gradually reinforce healthier adaptive patterns.

At the same time, unfavorable results do not necessarily indicate treatment failure. They may instead reveal areas where existing interpretations remain active, where new behaviors require further development, or where environmental conditions continue to reinforce previous adaptations.

Clinicians are therefore encouraged to view results not merely as measures of success or failure, but as valuable information about how the adaptive system is functioning and where further intervention may be beneficial.

Representative Methodologies

Although Results are generated rather than directly treated, numerous clinical approaches intentionally use environmental feedback as part of the therapeutic process.

Examples include:

- Behavioral Experiments
- Exposure Therapy
- Skills Generalization
- Performance Feedback
- Goal Monitoring
- Outcome Tracking
- Progress Measurement
- Relapse Prevention Planning
- Values-Based Goal Setting

These interventions use real-world outcomes to provide evidence that supports continued learning and adaptation.

Relationship to Other Tiers

Results complete the observable adaptive cycle while simultaneously initiating the next.

The consequences of behavior become new experiences that enter the nervous system, where they are interpreted through the existing Core Interpretive Framework. Depending upon how those experiences are understood, they may reinforce established patterns or contribute to their gradual revision.

This recursive relationship distinguishes the Hierarchy of Human Change from linear models of behavior change. Rather than ending with outcomes, the framework recognizes that every outcome becomes the beginning of a subsequent cycle of adaptation.

The adaptive process therefore has no true endpoint. It represents an ongoing interaction between the individual and the environment throughout the lifespan.

Transition to Tier 1

Within the Hierarchy of Human Change, results do not conclude the adaptive process.

Instead, every result becomes a new lived experience.

A successful conversation becomes an experience.

A painful rejection becomes an experience.

A personal achievement becomes an experience.

A therapeutic breakthrough becomes an experience.

Each enters the nervous system as evidence, where it is interpreted, embodied, expressed through future behavior, and ultimately generates reinforced or additional results.

The adaptive cycle therefore continues throughout life, with every consequence contributing to or limiting future learning, prediction, and adaptation.

For this reason, the Hierarchy of Human Change is best understood as a weighted hierarchical model with a **continuous adaptive cycle** in which experience, interpretation, emotional and physiological regulation, behavior, and environmental feedback remain influencing one another.

6. The Hierarchical Adaptive Cycle

The Hierarchy of Human Change™ is composed of five hierarchical levels organized into a continuous adaptive cycle. The model is hierarchical in the sense that the levels differ in their long-term organizing influence and that each level is shaped by those that precede it. Experience provides the foundation for interpretation. Interpretation gives rise to emotional and physiological states. These states influence behavior, and behavior produces results. At the same time, influence flows in multiple directions, and the system remains recursive.

At the same time, the framework is recursive rather than linear. Results do not represent the conclusion of the adaptive process; they become new lived experiences that re-enter the system, initiating another cycle of adaptation. The hierarchy describes the organization of the adaptive process, while the cycle describes its continual operation.

The five hierarchical levels are neither independent components nor isolated stages through which an individual progresses once. Rather, they function as an integrated adaptive system in which each cycle generates new information that may reinforce, refine, or revise future interpretation, emotional and physiological regulation, behavior, and subsequent outcomes.

Although the framework describes a general progression from experience to results, influence is not strictly unidirectional. Activity within one hierarchical level frequently affects multiple others. New experiences may reshape interpretation; revised interpretations may alter emotional and physiological regulation; changes in physiological state may expand behavioral flexibility; and new behavioral patterns may produce different environmental outcomes. Human adaptation is therefore understood as the interaction of interdependent processes rather than isolated mechanisms.

Repeated adaptive cycles produce psychological momentum. Patterns reinforced across many cycles become increasingly efficient and automatic, contributing to both the stability of established patterns and the difficulty of modifying them. Conversely, sustained exposure to new experiences may gradually reorganize interpretation, emotional and physiological regulation, behavior, and subsequent results. Enduring adaptation therefore emerges through repeated cycles rather than isolated events.

The Hierarchy of Human Change™ proposes that human adaptation is simultaneously hierarchical and recursive. Its hierarchical character reflects differences in the long-term organizing influence of each level, while its recursive operation enables continual learning through ongoing interaction with the environment. Together, these characteristics describe human adaptation as a continuously self-updating system in which each adaptive cycle provides the foundation for the next.

Relationship to Predictive Processing and Related Frameworks

The Hierarchy of Human Change shares important conceptual ground with contemporary theories of predictive processing and active inference (Clark, 2013, 2016; Friston, 2010; Hohwy, 2013). Both approaches view the nervous system as continuously generating predictions, comparing those predictions against incoming sensory and interoceptive data, and updating internal models in response to prediction error. In this respect, the Core Interpretive Framework (Level 2) corresponds closely to the generative models described in predictive processing accounts.

The Hierarchy does not attempt to replace or compete with these formal theories. Rather, it offers a complementary clinical and organizational map. Predictive processing provides a powerful computational and neuroscientific account of *how* the brain minimizes uncertainty and updates beliefs. The Hierarchy of Human Change organizes the major *psychological and physiological levels* at which that updating process can be influenced in practice—lived experience, interpretive structures, emotional and physiological states, behavior, and environmental results—and highlights their differential influence on sustained change.

Where predictive processing focuses primarily on the inferential mechanisms of the nervous system, the Hierarchy emphasizes the practical architecture of change as it appears in clinical work: which levels are most accessible at a given time, how changes at one level tend to cascade (or fail to cascade) to others, and why lasting reorganization frequently involves revision of the interpretive codes that organize the rest of the adaptive cycle. In this way, the two frameworks can be viewed as mutually supportive rather than competing. Predictive processing supplies a rigorous account of the underlying computational processes; the Hierarchy supplies a structured map for locating interventions and understanding clinical patterns of change across multiple levels of human functioning.

The Hierarchy also draws on broader systems and biopsychosocial traditions. Its contribution lies not in proposing new neural mechanisms, but in organizing established findings into a coherent, clinically usable hierarchy of adaptive levels that makes the relationships among experience, meaning, physiology, behavior, and results more explicit.

7. Therapeutic Modalities Within the Hierarchy

One of the central purposes of the Hierarchy of Human Change™ is to provide an organizational framework through which existing therapeutic modalities may be understood in relation to one another. The framework does not propose that effective interventions work because they belong to a particular theoretical orientation. Rather, it suggests that therapeutic approaches often differ in the hierarchical level at which they most directly enter the adaptive system, while producing meaningful effects throughout the system as a whole.

From this perspective, the diversity of modern psychotherapy reflects the complexity of human adaptation itself. Different modalities have evolved to address different aspects of the adaptive process, each contributing valuable insights into how individuals learn, regulate, heal, and change. The Hierarchy of Human Change does not seek to reconcile these approaches by reducing them to a single method. Instead, it offers a common conceptual language through which their unique contributions can be understood within a shared adaptive framework.

Most therapeutic interventions influence more than one hierarchical level. Nevertheless, many demonstrate a primary point of therapeutic emphasis accompanied by predictable secondary effects throughout the adaptive system. The classifications presented below are intended as a conceptual illustration rather than a definitive taxonomy and should be understood as an invitation for continued discussion, refinement, and empirical evaluation.

Emerging and Unvalidated Approaches

A number of approaches currently used in some clinical or complementary settings have little to no meaningful supporting scientific research at this time. These include (but are not limited to):

- Human Design
- PSYCH-K
- Theta Healing
- Body Code / Emotion Code / Energy Code
- Reiki and related energy therapies
- Shamanic Healing / Soul Retrieval (when presented as a clinical intervention)
- Kambo

These approaches are noted at the bottom of Table 1 for completeness. Despite lack of research, these methodologies and therapies are consistently reported to be connected to key shifts and insights gained by individuals seeking change. Their inclusion in this paper does **not** constitute an endorsement of efficacy, but one of open questioning. Future research may clarify their potential effects, mechanisms, or limitations. Until such evidence exists, clinicians are encouraged to exercise appropriate caution and informed consent when clients inquire about or request these methods.

Table 2**Illustrative Mapping of Therapeutic Modalities Within the Hierarchy**

Therapeutic Modality	Primary Hierarchical Shift Level	Common Secondary Effects	Primary Mechanism of Change
12-Step Facilitation	Experience (1) / Behaviors (4)	Core Interpretive Framework (2)	Structured peer-supported behavioral and meaning change
5-MeO-DMT*	Emotional & Physiological States (3)	Core Interpretive Framework (2); Experience (1)	Rapid, intense ego-dissolution and physiological reset
Accelerated Resolution Therapy (ART)*	Core Interpretive Framework (2) / States (3)	Experience (1)	Imagery rescripting combined with bilateral stimulation
Acceptance and Commitment Therapy (ACT)	Core Interpretive Framework (2)	Behaviors (4)	Psychological flexibility and values-based action
Acupuncture	Emotional & Physiological States (3)	Experience (1); Behaviors (4)	Sensory-motor input and autonomic/interoceptive regulation
Adventure / Wilderness Therapy	Experience (1)	Emotional & Physiological States (3); Results (5)	Corrective lived experience in novel environments
AI-Supported Coaching Platforms*	Conscious & Auto-Generated Behaviors (4)	Core Interpretive Framework (2)	Personalized, scalable feedback and skill-building loops
Art, Music & Dance/Movement Therapies	Experience (1) / States (3)	Core Interpretive Framework (2)	Expressive and embodied processing of experience
Attachment-Based Therapy	Experience (1) / Core Interpretive Framework (2)	Emotional & Physiological States (3)	Corrective relational experience
Ayahuasca*	Emotional & Physiological States (3)	Core Interpretive Framework (2); Experience (1)	Intense visionary and purgative experience challenging meaning structures
Ayurvedic / AYUSH approaches (e.g., Shirodhara, Medhya Rasayana)	Emotional & Physiological States (3)	Core Interpretive Framework (2)	Constitutional balancing, herbal, and lifestyle regulation

Therapeutic Modality	Primary Hierarchical Shift Level	Common Secondary Effects	Primary Mechanism of Change
Behavioral Activation	Conscious & Auto-Generated Behaviors (4)	Results (5)	Behavioral engagement and positive reinforcement
Behavioral Experiments	Experience (1)	Core Interpretive Framework (2); Results (5)	Testing predictions through real-world action
Behavioral Self-Monitoring	Conscious & Auto-Generated Behaviors (4)	Results (5)	Awareness and tracking of target behaviors
Bioenergetic Analysis / Core Energetics*	Emotional & Physiological States (3)	Core Interpretive Framework (2)	Body-oriented release of characterological and energetic holding patterns
Biofeedback & HRV Training	Emotional & Physiological States (3)	Core Interpretive Framework (2)	Physiological self-regulation
Breathwork (incl. Holotropic)	Emotional & Physiological States (3)	Behaviors (4); Core Interpretive Framework (2)	Autonomic regulation and non-ordinary states
Clinical Hypnosis / Hypnotherapy	Core Interpretive Framework (2)	Emotional & Physiological States (3)	Focused attention and adaptive restructuring
Cognitive Behavioral Therapy (CBT)	Core Interpretive Framework (2)	Behaviors (4)	Cognitive restructuring and reinterpretation
Cognitive Processing Therapy (CPT)	Core Interpretive Framework (2)	Behaviors (4)	Restructuring of trauma-related meanings
Compassion-Focused Therapy	Core Interpretive Framework (2)	Emotional & Physiological States (3)	Cultivation of self-compassion and soothing systems
Compassionate Inquiry	Core Interpretive Framework (2)	Emotional & Physiological States (3)	Compassionate exploration of underlying stories and somatic markers
Contingency Management	Conscious & Auto-Generated Behaviors (4)	Results (5)	Structured reinforcement of desired behaviors
Corrective Relational Experiences	Experience (1)	Core Interpretive Framework (2)	New interpersonal evidence that updates expectations
Craniosacral Therapy*	Emotional & Physiological States (3)	Experience (1)	Gentle manual regulation of craniosacral system and nervous system

Therapeutic Modality	Primary Hierarchical Shift Level	Common Secondary Effects	Primary Mechanism of Change
Dialectical Behavior Therapy (DBT)	Behaviors (4) / States (3)	Core Interpretive Framework (2)	Skills in emotion regulation, distress tolerance, and interpersonal effectiveness
Digital Therapeutics (app-based CBT, exposure, self-guided programs)	Behaviors (4) / Core Interpretive Framework (2)	Results (5)	Structured skill practice and cognitive restructuring delivered digitally
DMT (various formulations)*	Emotional & Physiological States (3)	Core Interpretive Framework (2); Experience (1)	Short, intense visionary experience
Ecstatic Dance*	Experience (1) / Emotional & Physiological States (3)	Core Interpretive Framework (2)	Free-form movement, rhythm, and non-ordinary states for emotional release and embodiment
Emotion-Focused Therapy (EFT)	Emotional & Physiological States (3)	Core Interpretive Framework (2)	Processing and transformation of emotion
Emotional Freedom Techniques (EFT / Tapping)*	Emotional & Physiological States (3)	Core Interpretive Framework (2)	Somatic tapping combined with cognitive/emotional processing
Environmental Modification	Experience (1)	Behaviors (4); Results (5)	Changing external conditions that shape adaptation
Equine-Assisted Therapy	Experience (1)	Emotional & Physiological States (3)	Corrective relational and embodied experience with animals
Executive / Leadership / Life Coaching	Conscious & Auto-Generated Behaviors (4)	Core Interpretive Framework (2)	Goal-directed action, accountability, and identity reframing
Executive Function Coaching	Conscious & Auto-Generated Behaviors (4)	Core Interpretive Framework (2)	Strengthening of planning, inhibition, and goal-directed action
Exercise & Movement-Based Therapies	Emotional & Physiological States (3)	Behaviors (4); Results (5)	Physiological regulation through physical activity
Existential Therapy	Core Interpretive Framework (2)	Experience (1)	Confrontation with meaning, freedom, and responsibility
Experiential Therapy	Experience (1)	Emotional & Physiological States (3)	Direct corrective emotional and sensory experience
Exposure Therapy (incl. Prolonged Exposure & Written Exposure)	Experience (1)	Core Interpretive Framework (2); Results (5)	Corrective lived experience and fear extinction

Therapeutic Modality	Primary Hierarchical Shift Level	Common Secondary Effects	Primary Mechanism of Change
Eye Movement Desensitization and Reprocessing (EMDR)	Core Interpretive Framework (2)	Emotional & Physiological States (3)	Adaptive memory reprocessing
Family Systems Therapy	Experience (1)	Core Interpretive Framework (2); Results (5)	Interpersonal system reorganization
Focusing (Gendlin)	Emotional & Physiological States (3)	Core Interpretive Framework (2)	Felt-sense awareness and bodily knowing
Group Therapy	Experience (1)	Core Interpretive Framework (2)	Corrective interpersonal experience
Gut-Directed Hypnotherapy	Emotional & Physiological States (3)	Core Interpretive Framework (2)	Regulation of gut–brain signaling and visceral hypersensitivity
Habit Reversal Training	Conscious & Auto-Generated Behaviors (4)	Results (5)	Awareness and competing response training
Hakomi Method	Emotional & Physiological States (3)	Core Interpretive Framework (2)	Mindfulness-based somatic exploration of core material
Havening Techniques*	Emotional & Physiological States (3)	Core Interpretive Framework (2)	Electro-sensory soothing and depotentiation of traumatic encoding
Ibogaine / Noribogaine*	Emotional & Physiological States (3)	Core Interpretive Framework (2); Experience (1)	Prolonged altered state and disruption of addictive patterning
Immersive VR Meditation / VR Mindfulness	Emotional & Physiological States (3)	Core Interpretive Framework (2)	Enhanced attentional and physiological regulation via immersion
Indigenous Drumming & Therapeutic Drumming*	Emotional & Physiological States (3)	Experience (1)	Rhythmic entrainment and community connection
Internal Family Systems (IFS)	Core Interpretive Framework (2)	Emotional & Physiological States (3)	Internal integration and relationship with protective parts
Interpersonal Psychotherapy (IPT)	Core Interpretive Framework (2)	Experience (1); Behaviors (4)	Improvement of interpersonal functioning and role transitions
Ketamine-Assisted Therapy	Emotional & Physiological States (3)	Core Interpretive Framework (2); Experience (1)	Rapid neurochemical modulation and temporary disruption of rigid predictive models
LSD / Lysergide*	Emotional & Physiological States (3)	Core Interpretive Framework (2); Experience (1)	Prolonged classic psychedelic state supporting psychological flexibility

Therapeutic Modality	Primary Hierarchical Shift Level	Common Secondary Effects	Primary Mechanism of Change
Mapuche Ancestral Medicine & similar intercultural models*	Experience (1) / Core Interpretive Framework (2)	Emotional & Physiological States (3)	Spiritual, land-based, and community reconnection practices
Massage & Bodywork	Emotional & Physiological States (3)	Experience (1)	Sensory-motor and autonomic regulation through touch
MDMA-Assisted Therapy*	Emotional & Physiological States (3)	Core Interpretive Framework (2); Experience (1)	Enhanced emotional openness and reduced fear response
Mental Performance Coaching	Conscious & Auto-Generated Behaviors (4)	Core Interpretive Framework (2)	Training of focus, confidence, composure, and pressure management
Mentalization-Based Treatment (MBT)	Core Interpretive Framework (2)	Emotional & Physiological States (3)	Enhancement of mentalizing and reflective function
Mescaline*	Emotional & Physiological States (3)	Core Interpretive Framework (2); Experience (1)	Classic serotonergic psychedelic effects with long-duration visionary experience
Mindfulness-Based Interventions (MBSR, MBCT)	Emotional & Physiological States (3)	Core Interpretive Framework (2)	Attentional and interoceptive regulation
Motivational Interviewing	Core Interpretive Framework (2)	Behaviors (4)	Resolution of ambivalence and strengthening of commitment
Narrative Therapy	Core Interpretive Framework (2)	Experience (1)	Re-authoring of personal narratives and identity
Neuro-Linguistic Programming (NLP)	Core Interpretive Framework (2)	Behaviors (4)	Reframing of internal representations and strategies
Neuroaffective Touch*	Emotional & Physiological States (3)	Experience (1); Core Interpretive Framework (2)	Therapeutic touch focused on early attachment and developmental trauma
Neurofeedback	Emotional & Physiological States (3)	Core Interpretive Framework (2)	Direct training of neural regulation patterns
Non-hallucinogenic psychoplastogens*	Emotional & Physiological States (3)	Core Interpretive Framework (2)	Promotion of structural neuroplasticity without classic psychedelic effects
Peer Support Models	Experience (1)	Core Interpretive Framework (2); States (3)	Corrective relational experience and social learning
Pharmacotherapy (antidepressants, anxiolytics, etc.)	Emotional & Physiological States (3)	Core Interpretive Framework (2); Behaviors (4)	Direct modulation of neurochemical and physiological systems

Therapeutic Modality	Primary Hierarchical Shift Level	Common Secondary Effects	Primary Mechanism of Change
Polyvagal-informed Therapy	Emotional & Physiological States (3)	Core Interpretive Framework (2)	Nervous system regulation and safety cues
Positive Psychology Interventions	Core Interpretive Framework (2)	Behaviors (4); Results (5)	Cultivation of strengths, gratitude, and positive emotion
Problem-Solving Therapy	Core Interpretive Framework (2)	Behaviors (4)	Structured problem-solving skill-building
Progressive Muscle Relaxation	Emotional & Physiological States (3)	Behaviors (4)	Musculoskeletal and autonomic downregulation
Psilocybin-Assisted Therapy*	Emotional & Physiological States (3)	Core Interpretive Framework (2); Experience (1)	Altered perception, ego-dissolution, and loosening of interpretive frameworks
Psychodrama	Experience (1)	Core Interpretive Framework (2)	Enactment of experience and roles
Reality Therapy / Choice Theory	Core Interpretive Framework (2)	Behaviors (4)	Responsibility and need-satisfying choice
Schema Therapy	Core Interpretive Framework (2)	Emotional & Physiological States (3)	Schema modification and mode work
Sensorimotor Psychotherapy	Emotional & Physiological States (3)	Core Interpretive Framework (2)	Body-oriented processing of trauma and implicit memory
Short-term Psychodynamic Psychotherapy	Core Interpretive Framework (2)	Emotional & Physiological States (3)	Exploration of unconscious patterns and relational dynamics
Skills Training (general)	Conscious & Auto-Generated Behaviors (4)	Experience (1); Results (5)	Acquisition of new adaptive behavioral repertoire
Solution-Focused Brief Therapy	Core Interpretive Framework (2)	Behaviors (4)	Construction of preferred future and exception-finding
Somatic Experiencing®	Emotional & Physiological States (3)	Core Interpretive Framework (2)	Completion of thwarted defensive responses
Sound Healing / Sound Therapy*	Emotional & Physiological States (3)	Experience (1)	Vibrational and auditory regulation of nervous system state
Spinal Manipulative Therapy / Chiropractic / Osteopathic Care	Emotional & Physiological States (3)	Experience (1); Behaviors (4)	Manual sensory-motor and musculoskeletal regulation
Sweat Lodge / Purification Ceremonies*	Experience (1) / States (3)	Core Interpretive Framework (2)	Communal ritual, heat, prayer, and embodied purification

Therapeutic Modality	Primary Hierarchical Shift Level	Common Secondary Effects	Primary Mechanism of Change
Talking Circles / Intertribal Talking Circles*	Experience (1)	Core Interpretive Framework (2)	Non-hierarchical group sharing and collective meaning-making
Transcranial Magnetic Stimulation (TMS) / Deep TMS	Emotional & Physiological States (3)	Core Interpretive Framework (2)	Non-invasive neuromodulation of targeted brain circuits
Trauma Release Exercises (TRE)*	Emotional & Physiological States (3)	Behaviors (4)	Neurogenic tremor for discharge of survival stress
Trauma-Informed Yoga & broader Yoga / Tai Chi / Qigong	Emotional & Physiological States (3)	Behaviors (4)	Movement, breath, and interoceptive regulation
Virtual Reality Exposure Therapy	Experience (1)	Core Interpretive Framework (2); Results (5)	Controlled, immersive corrective experiences that update threat predictions
Virtual Reality Exposure Therapy	Experience (1)	Core Interpretive Framework (2); Results (5)	Controlled, immersive corrective experiences that update threat predictions
VR for Chronic Pain, Stress & Relaxation	Emotional & Physiological States (3)	Behaviors (4)	Distraction, regulation, and altered interoceptive experience
Bioresonance / Biofrequency	Emotional & Physiological States (3)	Experience (1)	Detection and modulation of claimed electromagnetic frequencies associated with physiological or energetic states.
Body Code / Emotion Code / Energy Code**	Emotional & Physiological States (3) / Core Interpretive Framework (2)	Experience (1)	Identification and release of trapped emotions and energetic imbalances
Human Design**	Core Interpretive Framework (2)	Experience (1)	Identity and energetic-type interpretive framework
Kambo**	Emotional & Physiological States (3)	Experience (1)	Strong physiological purge and autonomic activation
PSYCH-K**	Core Interpretive Framework (2)	Emotional & Physiological States (3)	Subconscious belief change via muscle testing and balances
Reiki & related energy therapies**	Emotional & Physiological States (3)	Experience (1)	Facilitation of relaxation and perceived energetic balance
Shamanic Healing / Soul Retrieval**	Core Interpretive Framework (2) / Experience (1)	Emotional & Physiological States (3)	Ritual journeying and symbolic restoration of self or spirit

Therapeutic Modality	Primary Hierarchical Shift Level	Common Secondary Effects	Primary Mechanism of Change
Theta Healing**	Core Interpretive Framework (2)	Emotional & Physiological States (3)	Belief and “download” work in theta state

No asterisk = Substantial supporting research

* = Emerging science / limited or still-developing controlled research

** = No meaningful supporting scientific or third-party research currently.

Shared Mechanisms Across Diverse Modalities

One implication of the Hierarchy of Human Change is that therapeutic modalities that appear substantially different may nevertheless facilitate adaptation through overlapping mechanisms. Although interventions frequently emphasize different hierarchical levels, changes initiated at one level often influence the functioning of the adaptive system as a whole.

For example, Cognitive Behavioral Therapy primarily targets the Core Interpretive Framework by helping individuals examine and revise patterns of interpretation. Breathwork and Polyvagal-informed interventions, by contrast, begin with emotional and physiological regulation. Exposure Therapy introduces new lived experiences that may gradually reshape interpretation, while Clinical Hypnosis may begin by modifying interpretation in ways that influence physiological regulation and subsequent behavior. Despite these differing entry points, each may ultimately contribute to changes across multiple hierarchical levels.

From this perspective, therapeutic modalities are often distinguished less by whether they facilitate adaptation than by where they most directly enter the adaptive system.

A Framework for Integration

The Hierarchy of Human Change does not suggest that one therapeutic modality is inherently superior to another. Rather, it proposes that many approaches have developed expertise in working with particular aspects of the adaptive process. Recognizing these strengths provides an opportunity to understand therapeutic diversity as complementary rather than competitive.

For clinicians, the framework offers a conceptual map for selecting interventions based on the hierarchical level most central to a client's presenting pattern while appreciating the broader systemic effects those interventions may produce. For researchers, it offers a structure for investigating how different modalities may converge on shared mechanisms of adaptation despite differing theoretical traditions. For educators, it provides a common language for teaching how established psychological theories and therapeutic approaches relate to one another within a unified model.

Most importantly, the framework invites dialogue. The classifications presented here are intended as a starting point rather than a final authority. As research advances and clinical understanding evolves, these mappings may be refined, expanded, or challenged. Such refinement is not a limitation of the framework but an expression of its purpose: to provide a shared conceptual structure through which the field can continue exploring how human adaptation occurs.

The Hierarchy of Human Change is not an argument for replacing existing modalities. It is an invitation to understand how they fit together.

8. Clinical Applications

The Hierarchy of Human Change™ provides clinicians with a structured framework for organizing assessment, case formulation, and treatment planning around the adaptive processes that shape human functioning. By understanding experience, interpretation, emotional and physiological regulation, behavior, and environmental feedback as interconnected hierarchical levels within a continuous adaptive cycle, clinicians can more clearly conceptualize how adaptive patterns develop, persist, and reorganize over time.

Practitioners whose primary tools are pharmacological or body-based (physicians, functional medicine clinicians, chiropractors, acupuncturists, physical therapists) often work most directly at Level 3, while simultaneously generating new experiences (Level 1) and altering behavioral possibilities (Level 4). The framework provides a shared language for sequencing these interventions with meaning-level and behavioral work so that physiological gains are more likely to become enduring systemic change.

Rather than focusing exclusively on individual symptoms or isolated interventions, the framework encourages clinicians to examine the relationships among the processes that contribute to a client's current pattern of adaptation. This systems perspective supports a more integrated understanding of both presenting concerns and opportunities for therapeutic change.

Current:

The hierarchical organization of the framework suggests that treatment planning involves two complementary considerations: clinical accessibility and hierarchical dependency.

Clinical accessibility refers to the level of the adaptive system that is currently most available for therapeutic intervention. Hierarchical dependency recognizes that each level builds upon the adaptive functions of those that precede it, allowing change at one level to influence those above it.

Suggested:

The organization of the framework suggests that treatment planning involves two complementary considerations: clinical accessibility and differential influence.

Clinical accessibility refers to the level of the adaptive system that is currently most available for therapeutic intervention. Differential influence recognizes that changes at certain levels (particularly Level 2 when accessible) tend to produce more lasting reorganization across the rest of the adaptive cycle than isolated changes at other levels.

Case Formulation

Clinical formulation begins by understanding how a client's current pattern of adaptation has been organized.

The framework provides a structure for integrating developmental history, significant life experiences, patterns of interpretation, emotional and physiological regulation, behavioral strategies, and environmental feedback into a coherent adaptive model. Rather than viewing these observations as separate domains of assessment, the framework considers them interacting expressions of the same adaptive system.

This perspective also helps explain why individuals presenting with similar symptoms may require different therapeutic approaches. Similar behaviors may emerge from different interpretive frameworks, emotional states, developmental experiences, or environmental contingencies. Effective formulation therefore depends not only on identifying *what* is occurring, but also on understanding *how* the adaptive system has become organized.

Treatment Planning

The organization of the framework suggests that treatment planning involves two complementary considerations: clinical accessibility and differential influence.

Clinical accessibility refers to the level of the adaptive system that is currently most available for therapeutic intervention. Differential influence recognizes that changes at certain levels—particularly Level 2 when it is accessible—tend to produce more lasting reorganization across the rest of the adaptive cycle than isolated changes at other levels. In many clinical situations, however, Level 2 is not immediately accessible.

For example, individuals experiencing significant autonomic dysregulation may initially benefit from interventions that strengthen emotional and physiological regulation (Level 3). As the nervous system becomes more regulated, greater cognitive flexibility often emerges, creating new results and experiences that increase capacity for exploration and reorganization within Level 2. Likewise, behavioral interventions may generate corrective experiences that expand the individual's readiness for deeper interpretive work.

The framework therefore recognizes that the most appropriate point of intervention is not always the level upon which long-term adaptive organization ultimately depends. Early interventions may establish the conditions that allow subsequent work at more influential levels, while successful changes within the Core Interpretive Framework may gradually reorganize emotional and physiological regulation, behavior, and future adaptive cycles.

Treatment planning therefore becomes an exercise in sequencing as much as selection: identifying where the adaptive system is most accessible today while recognizing how changes at different levels may progressively influence the organization of the system as a whole.

Monitoring Adaptive Reorganization

Because adaptation unfolds through recurring cycles, therapeutic progress may be observed across multiple hierarchical levels rather than within a single domain of functioning.

Early indicators of change may include increased emotional regulation, greater behavioral flexibility, or shifts in the interpretation of familiar experiences. Over time, these changes may begin to influence one another, producing new patterns of interaction with the environment and generating experiences that reinforce continued adaptation.

From this perspective, progress is reflected not only in symptom reduction but also in the increasing flexibility, coherence, and adaptability of the system itself.

Collaboration Across Therapeutic Approaches

The Hierarchy of Human Change offers a shared conceptual language through which clinicians from different theoretical orientations can examine the adaptive processes they address in practice.

Each therapeutic modality contributes specialized knowledge regarding particular hierarchical levels, while simultaneously influencing the broader adaptive system. Recognizing these complementary strengths creates opportunities for richer collaboration, more intentional sequencing of interventions, and a deeper appreciation for how diverse therapeutic approaches contribute to human adaptation.

Rather than asking which modality is most effective in general, the framework encourages a different question:

At this stage of adaptation, which intervention is most likely to move the system forward?

This shift in perspective emphasizes clinical judgment, adaptive timing, and the thoughtful integration of therapeutic expertise.

9. Scope, Limitations, and Future Development

As an integrative conceptual framework, the Hierarchy of Human Change™ is intended to organize established scientific principles into a coherent model of human adaptation. Like any conceptual model, its primary value at version 1.0 lies in its capacity to invite interdisciplinary

dialogue, clarify relationships among existing findings, support clinical reasoning, and generate useful and testable questions.

Version 1.0 should be understood as a starting point rather than a finished or empirically validated theory. The hierarchical organization, the proposed weighted influence of the Core Interpretive Framework, and the clinical mappings offered in this paper are conceptual proposals grounded in existing research and clinical observation and require continued systematic evaluation.

The framework presented in this paper represents Version 1.0 of that effort. It is offered as a foundation for continued refinement through scholarly dialogue, clinical application, interdisciplinary collaboration, and scientific research.

Scope of the Framework

The Hierarchy of Human Change is designed to describe the organization of adaptive processes rather than the detailed mechanisms of every individual psychological phenomenon.

Accordingly, the framework does not attempt to replace or exhaustively explain the extensive bodies of research within neuroscience, developmental psychology, cognitive science, behavioral psychology, attachment theory, learning theory, pharmacology, psychotherapy, or medicine. Instead, it provides an organizational structure through which these complementary fields may be understood as interacting components of a larger adaptive system.

The framework is therefore best understood as a conceptual map. Like any map, it emphasizes relationships among components while necessarily simplifying the complexity of the territory it represents.

Current Limitations

First, the Hierarchy of Human Change is a conceptual organizing and observed framework and is not yet a formally tested clinical algorithm. The boundaries between levels are organizational rather than anatomical, and the proposed relationships among levels represent reasoned synthesis rather than established causal pathways.

Second, while clinical observation and systems reasoning support the view that the Core Interpretive Framework (Level 2) often carries particular weight in sustained change, this differential influence has not yet been subjected to rigorous empirical testing, and should

therefore be treated as a working hypothesis rather than a demonstrated fact. Ongoing research continues to examine whether revision at Level 2 when available as an entry point, reliably produces more durable cascading effects than work focused primarily at other levels.

Third, the mappings of therapeutic modalities presented in Table 1 are illustrative. Many interventions influence multiple levels simultaneously, and the inclusion of emerging or low-evidence approaches (even when marked) does not constitute an endorsement of their efficacy. These mappings are offered to stimulate discussion and refinement, not as a definitive taxonomy.

Fourth, no formally controlled studies have yet evaluated whether clinicians using the Hierarchy of Human Change produce better case formulations, more effective treatment sequencing, or improved client outcomes compared with standard practice. Claims of clinical utility remain provisional until such evidence is developed.

These limitations are characteristic of early-stage integrative frameworks. They do not invalidate the potential usefulness of the model, but they do define the appropriate level of confidence that should currently be placed in its specific claims.

Opportunities for Refinement

The framework is intended to evolve. Its purpose is to encourage dialogue in connecting methodologies and therapies to maximize the understanding of human adaptation.

Continued dialogue among clinicians, researchers, educators, and scholars will likely expand, clarify, and refine both the hierarchical organization and the relationships proposed throughout this paper.

Future developments may include additional specification of adaptive mechanisms, expanded integration with emerging neuroscientific findings, refinement of therapeutic mappings, and the development of standardized methods for clinical formulation, educational applications, and research.

Rather than representing a finished theory, Version 1.0 should be understood as the beginning of an ongoing collaborative process.

Scientific Evaluation

Ultimately, the long-term value of the Hierarchy of Human Change will depend upon scientific evaluation.

Future research may investigate questions such as:

- Does the framework improve clinical case formulation?
- Does it facilitate interdisciplinary communication?
- Can clinicians reliably identify primary hierarchical levels across diverse clinical presentations?
- Does treatment planning informed by the hierarchy improve therapeutic outcomes?
- Can the proposed relationships among hierarchical levels be operationalized and empirically tested?

These and many other questions represent opportunities for continued investigation.

The Hierarchy of Human Change is not simply to organize existing knowledge, but to provide a conceptual framework capable of generating new hypotheses regarding the adaptive processes that underlie human functioning. This is presented as Version 1.0 with the explicit expectation that future editions will be revised in light of empirical findings, clinical feedback, and scholarly critique. Its long-term value will depend less on the elegance of the initial formulation than on its capacity to generate useful research, improve clinical reasoning, and withstand careful evaluation over time.

If the Hierarchy of Human Change contributes to a more integrated understanding of human adaptation and encourages continued dialogue across disciplines, it will have fulfilled its intended purpose.

10. Future Research

The Hierarchy of Human Change™ is intended to serve as an evolving conceptual framework capable of generating meaningful questions for future scientific investigation. Its long-term value will depend upon empirical evaluation, interdisciplinary collaboration, and continued refinement through research, clinical application, and education.

The framework creates opportunities for investigation across multiple levels of inquiry. Individual hierarchical levels may be examined independently, while the relationships among those levels may be explored as components of an integrated adaptive system. Future research may also examine the framework's usefulness in clinical case formulation, treatment planning, interdisciplinary communication, professional education, and the organization of existing psychological knowledge.

Several areas appear particularly well suited for future investigation.

Operationalization of the Hierarchical Levels

Future research may develop reliable methods for operationalizing each hierarchical level and examining the relationships among them. Such work may explore whether the proposed organization of experience, interpretation, emotional and physiological regulation, behavior, and results can be measured consistently across diverse populations, developmental stages, and clinical settings.

Sequencing of Therapeutic Intervention

The distinction between **clinical accessibility** and **hierarchical dependency** offers numerous opportunities for empirical investigation. Future studies may examine how intervention at one hierarchical level influences readiness for work at another, whether different sequences of intervention produce different patterns of adaptive reorganization, and how therapeutic timing contributes to long-term outcomes.

Integration Across Therapeutic Modalities

The framework also provides a structure for investigating how diverse therapeutic approaches influence common adaptive processes. Future research may examine where interventions primarily enter the adaptive system, how their effects propagate across other hierarchical levels, and whether modalities that differ theoretically converge through shared mechanisms of adaptive change.

Longitudinal Models of Adaptation

Because the framework conceptualizes adaptation as a continuous recursive process, longitudinal research may provide valuable insight into how adaptive patterns evolve over time. Such investigations may clarify how new experiences reshape interpretation, how interpretive change influences emotional and physiological regulation, and how repeated adaptive cycles contribute to the emergence, persistence, and reorganization of behavioral patterns.

Educational and Clinical Utility

Future investigation may also examine the practical applications of the framework itself. Areas of inquiry include its usefulness in clinical education, supervision, interdisciplinary collaboration, case formulation, treatment planning, and professional communication. Understanding whether the framework improves conceptual organization and supports more integrated clinical reasoning represents an important avenue for continued study.

Continuing the Conversation

Scientific understanding advances through observation, critical evaluation, empirical investigation, and thoughtful refinement. The Hierarchy of Human Change™ is presented as **Version 1.0** with the expectation that future editions will continue to evolve alongside the scientific disciplines from which it draws.

As new evidence emerges, additional perspectives are considered, and practical applications are explored, the framework should continue to be refined. Future versions may expand upon the hierarchical organization, clarify adaptive relationships, strengthen empirical support, and

incorporate insights from researchers, clinicians, educators, and professionals working across psychology, neuroscience, behavioral science, and related disciplines.

Researchers, clinicians, educators, and students interested in discussing the framework, sharing observations, proposing refinements, or exploring opportunities for collaboration are warmly invited to participate in its continued development. Correspondence may be directed to:

research@HierarchyOfHumanChange.org

The goal of the Hierarchy of Human Change™ is to contribute to a growing interdisciplinary dialogue about the adaptive processes that shape human experience. It is offered as an evolving framework, with the expectation that its greatest strength will emerge through continued collaboration, scientific investigation, and the collective pursuit of understanding.

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