*Philosophy of Coaching: An International Journal*
*Volume 10, Issue 2, November 2025, 54-73.*
*http://dx.doi.org/10.22316/poc/10.2.05*

# Embodiment in Coaching: Expanding Coaching's Cognitive Horizon with a 4E Approach

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## Abstract

While coaching has become a powerful modality for supporting growth and transformation, it continues to privilege explicit cognitive and behavioral methods, often at the expense of the implicit and embodied dimensions that shape perception, insight, and change. Drawing on 4E cognitive science, somatics, relational neurobiology and robotics studies, this article challenges that bias by arguing for a more holistic coaching paradigm that honors the body's role in cognition and transformation. It presents practical frameworks and interventions grounded in both theory and lived experience and proposes that embodiment deepens coaching impact and responds to emerging technological challenges such as AI.

*Keywords: coaching, embodiment, 4E cognition, cognitive science, somatic psychology.*

## Introduction

This theoretical and conceptual article aims to challenge a core bias at the heart of coaching: its privileging of explicit cognitive processes over the embodied, implicit foundations of human cognition and change.

Since its inception, professional coaching has emphasized explicitly cognitive skills such as open-ended questions, active listening, and strengths-based assessments, as principal tools for facilitating insight and transformation (English et al., 2018; International Coaching Federation (ICF), 2019). While effective, this approach largely dismisses the role of implicit cognitive processes and the body's foundational role in decision-making, motivation and change. Beyond vague references in the professional competencies to "notice … non-verbal cues", "use coach's intuition" or "embody a coaching mindset" (ICF, 2019), the role of the body and implicit cognitive processes within coaching practice remains largely marginalized throughout the mainstream industry.

Yet these conventional approaches appear to overlook what Lakoff and Johnson (1999) describe as "the rule of thumb among cognitive scientists": that more than 95% of cognition functions outside of the explicit conscious workspace, yet it shapes all of its operations. Informed by the recent 4E framework of mind within cognitive science, which views cognition as inherently embodied, embedded, enacted and extended (Newen et al., 2018), this article explores how coaching might evolve when grounded in this more holistic understanding of the human mind and cognition.

Long considered merely an output function of a computational brain, embodiment theory has now reconstituted the mind as an emergent phenomenon arising out of complex human

neurological and physiological systems interacting within their context (Varela et al., 1991; Siegel, 2020). Our cognitive operations are unarguably entangled with our physical ones.

Ecological and enacted cognition studies have demonstrated that navigating complex scenarios and achieving goals can often be accomplished by the body without relying on internal mental representations or conceptual reasoning (Barrett, 2011). As Wilson and Golonka (2013, p. 1) put it,

> [e]mbodiment is the surprisingly radical hypothesis that the brain is not the sole cognitive resource we have available to us to solve problems.

The implications for coaching are clearly profound.

Additionally, research has demonstrated the body's role in diverse aspects of psychological functioning ranging from creativity, decision-making and motivation through to psychological safety, emotional intelligence and relational attunement (Siegel, 2020; Baker, 2022; Gendlin, 1993; Claxton, 2015). These findings underscore the enormous latent potential for coaches to significantly augment their impact with an embodied approach.

Despite this vast body of growing and compelling evidence regarding the body's core role in cognition, decision-making and creative thought, the coaching industry has been slow in accepting and integrating embodied and somatic-based approaches within its frameworks, including within the competencies and assessment markers. Where embodied methods do appear, they often seem superficial, veer into therapeutic territory, or fall short of what research suggests is possible. This has contributed to somatic-based coaching methods being sidelined as "niche" and unsuitable for many client contexts – particularly organizational ones.

This article offers a research-based, theoretical framework and practical model for integrating the principles of 4E embodied cognition within coaching practice. It seeks to augment the repertoire of coaching tools and techniques by showing practitioners how to seamlessly integrate embodied methods within their existing models, while urging the industry gatekeepers to align their standards and credentialing markers with current cognitive science.

It also argues that such a shift may serve as a crucial response to the growing risk of redundancy posed by emerging technologies such as AI. By emphasizing the irreplaceably human dimension of coaching, it may prove to be the most effective way to future-proof and ensure the relevance of humans within the profession.

**Methodology, Synthesis & Literature Analysis**

This article employs a theoretical and conceptual methodology that draws on scholarly literature across cognitive science, phenomenology, somatic psychology, and coaching studies to construct an embodied coaching model informed by the 4E framework of cognition. Instead of empirical testing, my aim is to synthesize diverse domains of knowledge and long personal experience into a coherent, applicable framework that augments the current coaching discourse and practice.

My interest in embodiment originates not with academic theory, but from early professional experience in dance and physical theater, where I first encountered the body as a vehicle for expression, insight and creativity. While classically trained, I was inspired by varied contemporary approaches such as Contact Improvisation (Kimmel, 2018), Gaga (Galili, 2015) and the work of Martha Graham (Yaari, 2003), Jiri Kilian (Lanz, 1995), and Pina Bausch (Duan & Yan, 2025), among others, all of which engaged the body as an instrument of intelligent action and expression in non-verbal ways that can parallel coaching. The work of Rudolph Laban (1950) and the somatic architectures of performance further afforded a non-verbal fluency that profoundly shaped my understanding of communication, behavior and human development.

Upon entering the coaching profession, I was surprised to discover how marginal the body remained in the mainstream approaches, despite widespread scientific consensus that cognition is predominantly implicit and deeply embodied. It appeared to me that many existing somatic coaching paradigms leaned narrowly on somatic therapy traditions or martial arts while often overlooking the broader dimensions addressed here.

Over a two-decade practitioner and educator career, I've actively engaged in experimentation and development of a broader theoretical and applied embodiment-based coaching model. My early research led to a pivotal connection with cognitive scientist Guy Claxton (2015). Through him, I encountered Eugene Gendlin's Focusing approach (Gendlin, 1978), which drew me deeper into the work of Merleau-Ponty (Reynolds, 2008), Lakoff and Johnson (1999), Varela and Rosch (Varela et al., 1991), Abram (2011), Barrett (2011) and Csordas (2008). Combined with my longstanding Buddhist practice and early experience in physical theater, these influences provided the scaffolding for articulating a broader theoretical and applied model of embodiment for coaches.

The sources included in this article were selected based on their relevance to three key criteria: 1) grounding in embodied cognitive science, somatic phenomenology, or Buddhist psychology; 2) demonstrated utility for coaching or adult development; 3) a capacity to address the gap between implicit and explicit cognition in existing coaching models. While the scope is interdisciplinary, the synthesis has been oriented by a pragmatic concern: how coaches can practically engage the full spectrum of human cognition in ways that are rigorous, ethical and transformative.

**Defining Embodiment: Context & Perspectives**

From the ancient Greek notions of *soma* (the physical body) and *psyche* (the immaterial mind or soul) through Descartes' *res extensa* and *res cogitans*, mind-body dualism dominated Western thought well into the early twentieth century. The modern term somatic, drawing from the Greek, simply means "of or relating to the body."

By contrast, many non-Western cultures more eagerly embraced the notion of body-mind integration. While Vedic philosophies trended closer to dualism, Taoist and Buddhist traditions acknowledged the profound body-mind interrelationship (Shulman, 2021). Notably, in contrast to the dualistic inclinations of many spiritual traditions, where the body is something to be transcended, sublimated or overcome (Ferrer, 2008), Buddhism emphasized its crucial role in cultivating liberating insight and freedom from existential suffering.

> Whoever develops & pursues mindfulness immersed in the body encompasses whatever skillful qualities are on the side of clear knowing. (Kāyagatā-sati Sutta, MN119)

In modern usage, embodiment carries a range of meanings. Metaphorically, it refers to abstract concepts (ideas, qualities, feelings etc.) seeming tangible as in *'She's the embodiment of wisdom.'* It may also describe simply being materially present in a physical form; the literal result of combining the prefix *em-* ("in") with the noun body.

It can also describe someone who appears to fully and comfortably inhabit their physicality, as epitomized in James Joyce's description of his protagonist Duffy who "lived at a little distance from his body, regarding his own acts with doubtful side-glances" (Joyce, 1914, p. 134), underscoring the dissociative relationship many moderns have with their animal form.

### *Psychology and Embodiment*

In psychology disembodiment refers to an inability to integrate the feeling body and cognitive mind (Mori, 2022). Embodiment, therefore, denotes the capacity to perceive, track and integrate somatic feelings and the body's movements and relationships within its environment with cognitive and affective functions, all aspects of the 4E approach. Consciousness and the sense of self is theorized to stem from the internalization of this informational flow (Damasio, 1999; Siegel, 2020).

### *Cognitive Science: Embodied Mind and Embodied Cognition*

Theories of embodied cognition and mind suggest that our cognitive processes, perceptions, and experiences are fundamentally shaped by and rooted in our bodily interactions with the world (Varela et al., 1991). They emphasize the role of sensory experiences, motor actions, environmental cues and the body's spatial orientation in shaping thought and perception (Wilson & Golonka, 2013; Claxton, 2015).

These views foreground the interconnectedness between the mind, body, action and the environment, highlighting that cognition is not solely confined to the brain but arises from the dynamic interplay between the brain, body, and the surrounding context including social contexts and the natural world (Siegel, 2020; Barrett, 2011; Varela et al., 1991).

These current perspectives have deep roots in Husserl's phenomenology (Behnke, 2024), whose notions of kinaesthetic consciousness led to the later expansive views of Merleau-Ponty regarding the body, world and mind (Reynolds, 2008).

Notably, philosopher David Abram (2011) significantly extends the environmental theory of body, mind, and world, when writing that "the human body is not a closed or static object, but an open, unfinished entity utterly entwined with the soils, water, and winds that move through it" (p. 110).

### *Understanding 4E Cognition*

A key development within cognitive science and embodied cognition theory is the 4E model of mind, which frames cognition as Embodied, Embedded, Enacted and Extended (Newen et al., 2018).

- *Embodied*: Cognition is shaped by the body's sensorimotor system and inseparable from lived, physical experience.
- *Embedded*: Thought processes are situated within and shaped by environment and context.
- *Enacted*: Cognition arises through active engagement within the world, not merely through internal computational processes.
- *Extended*: Cognition is distributed across tools, technologies, social interactions and even the environment itself.

These principles refute Cartesian mind-body dualism, demonstrating that mind emerges from the dynamic interplay between brain, body, and world.

### *Language, Communication, Intercorporeality and Attunement*

The act of language is widely viewed as inherently embodied (Lakoff & Johnson, 1999) and McGilchrist (2009) has noted that the "structures of language and content of thought exist in the body prior to their utterance" (p. 119) – a notion elegantly exploited in Eugene Gendlin's Focusing approach (Gendlin, 1978).

The body's role in thought and language is well evidenced, notably by studies showing how restricting hand movement and gesture impacts speech fluency and content (McGilchrist, 2009). Lakoff and Johnson (1999) add that "the very structure of reason itself comes from the details of our embodiment. The same neural and cognitive mechanisms that allow us to perceive and move around also create our conceptual systems and modes of reason" (p. 120).

Embodiment in communication studies recognizes that meaning is not only conveyed via vocal sounds and syntax, but also through non-verbal cues, gestures, movements, prosody and eye contact in conveying meaning, emotion and building connections (Carmichael & Mizrahi, 2023; Blair, 2003; Burgoon et al., 2021), with Siegel (2020) stating that "non-verbal behavior [is shown to be] a primary mode in which emotion is communicated" (p. 230).

Recent theoretical approaches to Husserlian intersubjectivity have emphasized that sophisticated interpersonal understanding often arises through *intercorporeality* – a shared bodily field of attunement and subtle inferences that may exceed the capacities of verbal language (Csordas, 2008). Csordas argues that the term "body language" is misleading because it implies that the nonverbal operates like verbal systems – with codes, grammar, and syntax – when in fact, it is an entirely different and irreducibly embodied mode of relational knowing (Csordas, 2008).

Attunement refers to the embodied, sensed interconnection with another being which Siegel describes as "a kind of person-to-person synchrony, one involving our bodily and mental

states, a form of biosynchrony that enables two individuals to become coupled as a we … [forming] the nonverbal basis of collaborative, contingent communication" (Siegel, 2020. p170).

### *Posture and Movement*

While several notable early studies on the psychological impacts of posture and movement initially failed the critical test of replication (Elsesser, 2020; Ranehill et al., 2015), subsequent research has endorsed their potential for positively influencing psychological state, cognitive function and decision-making (Awad et al., 2021; Elkjær et al., 2022).

Besides popular interventions such as "power poses," a wide range of movement and postural activities demonstrate significant effects on cognition and psychology including dance (Fong et al, 2024; Laban, 1950), yoga (Brunner et al., 2017), and even the relationship between walking and creative thought (Oppezzo & Schwartz, 2014).

### *The Affective Body*

The debate over where emotions sit in the causal chain of stimulus, appraisal, physical arousal and action responses has been ongoing since William James and Charles Darwin initiated it in the 1880s (Barrett & Lindquist, 2008). Whether one favors the Jamesian "Body Influences Mind," the Darwinian "Mind Influences Body," or the interactionist "Mind and Body Combine In Emotion" views, all highlight the inextricable relationship between emotion, body, mind and motivation.

Emotions are more than mere mental events. Their co-arising somatic markers (or bodily impressions) are implicated as critical factors in guiding motivations with enormous potential to influence decision-making (Damasio, 1999). These facts also indicate that high emotional intelligence requires a high degree of physiological awareness. Both have been shown to be crucial traits in those demonstrating adaptive decision-making skills in high stakes scenarios (Yip et al., 2020).

### *Robotics and AI*

Embodiment is of considerable interest for the fields of robotics and artificial intelligence where researchers strive to emulate human responses, language, problem-solving, and decision-making processes (Pfeiffer & Bongard, 2007; Barrett, 2011).

Ironically, while researchers sought to create machines for emulating human behavior, their efforts highlighted the unsuitability of linear machine modelling for imitating or characterizing human beings (Barrett, 2011). Early cognitivism attempted to explain human cognition through computer comparisons, viewing the brain as a linear processing machine or CPU. Yet early robots using this approach performed poorly at even relatively simple tasks (Pfeiffer & Bongard, 2007).

In contrast, embodied approaches view the mind and cognition as emergent phenomena arising from complex decentralized interacting systems, displacing the earlier linear machine models and their representationalist arguments (Varela et al., 1991). Newer generations of robotics and machine learning, informed by embodiment theory, have demonstrated

extraordinary successes, underscoring the critical role of embodiment even in higher cognitive processes (Barrett 2011; Siegel, 2020).

These advances have further exposed the unsuitability of machine metaphors for describing human processes, significantly boosting embodiment as a foundational framework for understanding the human mind and cognition (Pfeiffer & Bongard, 2007).

## Alternative Applied Embodiment Models

### *Embodied Therapy*

Therapeutic models understandably focus on healing, correction and the amelioration of clinically significant physical and psychological issues. Embodied therapeutic approaches emphasize the importance of the body in the therapeutic process, viewing emotions and trauma as held somatically, and that somatic tools such as movement, breath, touch and bodywork can promote relief and healing even from severe psychological and psychosomatic conditions such as PTSD (Van der Kolk, 2014; Siegel, 2020).

### *Embodied Learning*

Embodied learning is a pedagogical approach integrating theories of embodied cognition and somatics, acknowledging the importance of combining physical movement, sensory experiences and cognitive processing to enhance learning (Hrach, 2021).

Instead of solely relying on traditional "mentalistic" teaching methods such as lectures or rote memorization, embodied learning encourages students to actively engage their bodies in the learning process to deepen comprehension, improve retention, and foster a more holistic understanding of the subject matter (Macedonia, 2019).

### *Embodied Leadership*

Embodied leadership is an umbrella term for approaches that emphasize areas such as presence, mindfulness, somatic awareness, embodied wisdom, and emotional intelligence over cognitive abilities or hierarchical models (Brendel & Bennett, 2016; Scharmer & Kaufer, 2013).

It also stresses the importance of leaders embodying their values, intentions, and vision through their physical presence and actions (Brendel & Bennett, 2016). Some models draw from martial arts and therapeutic approaches, at times employing practitioner touch and manipulation (Strozzi-Heckler, 2014).

## Defining Coaching

While various definitions of coaching exist, this article uses the framework established by the International Coaching Federation that "coaching is partnering with clients in a thought provoking and creative process that inspires them to maximize their personal and professional potential" (Passmore et al., 2025, p. 7).

The ICF's core competencies, ethical codes, and assessment markers offer a widely accepted, though not uncontested, foundation for professional coaching, and provide the reference point for the critiques and proposals that follow.

## The Explicit Bias in Coaching Standards

While approaches informed by somatics, ontology, theater and nature-based practices have increasingly emerged within coaching (Eliadis, 2023), they've tended to be treated as more niche rather than mainstream. This marginalization is evident in the increasingly smaller space afforded to them within the evolving professional competencies and assessment markers.

To illustrate, the current ICF Competency 7 of Evokes Awareness is defined as

> Facilitates client insight and learning by using tools and techniques such as powerful questioning, silence, metaphor or analogy.

Yet the ICF PCC accreditation markers for this competency (7.1–7.4, 7.6) focus exclusively on the coach's ability to *ask* "clear, direct, primarily open-ended questions" in order to evoke new thinking. Despite the definition referencing "other tools and techniques," the PCC assessment criteria provide no options for scoring alternative methods, effectively narrowing the definition of best coaching practice (ICF, 2019).

Furthermore, Competency 6 marker 6.4 requires that the coach, "notices, acknowledges and explores the client's emotions, energy shifts, non-verbal cues or other behaviors" and marker 6.5 that coach "integrates the client's words, tone of voice and body language to determine the full meaning of what is being communicated" (ICF, 2019). While these criteria appear to acknowledge the body and other implicit modes of communication, their placement within Listens Actively rather than the Evokes Awareness competency suggests they're primarily viewed as tools for understanding the client, not for facilitating insight and new perspectives. The body is thus positioned as something to be read or decoded, not as a partner in the meaning-making process.

Among others, these examples indicate an institutional bias towards explicit, verbalized processes while eschewing the alternative modes of cognitive processing, inquiry and meaning-making that embodiment theory identifies as fundamental to how humans actually think, act and feel.

## Towards an Embodied Coaching Model

The competencies and perspectives outlined below offer a potential map for an embodied coaching model. Yet, just as maps can't expose the animate complexity of a terrain, what follows merely outlines some essential structures, while acknowledging far more can, and should, be said.

### *Embodied Presence*

Most contemporary definitions coalesce around the idea of presence as a faculty of present-moment, attentive awareness – one that actuates generative capacities such as greater resilience,

resourcefulness, creativity, and attunement (Siegel, 2020; Scharmer, 2013; Silsbee, 2010). In coaching literature, presence has been described as a meta competency (Silsbee, 2013) and "the underlying state that we access through mindfulness" (Silsbee, 2010. p. xvii), acknowledging correspondence while curiously marking a distinction between them both.

Mindfulness is commonly defined as a capacity of bare, non-judgemental awareness of present moment experience (Brendel & Bennett, 2016), a concept rooted in early Western academic translations of the Buddhist canonic term *sati* (Bodhi, 2011). However, later Buddhist scholars have argued that these modern interpretations risk oversimplifying and decontextualizing *sati*, which carries a far richer set of meanings. Rather than mere bare attention, *sati* arises interdependently with qualities such as clear comprehension, remembering, confidence, kindness, attentional control, and consciousness, and is inextricably embedded within the ethical and philosophical frameworks of the Eightfold Path (Bodhi, 2011).

Importantly, *sati* is inherently embodied and relational. The earliest known instructions in the *Satipaṭṭhāna Sutta* (MN10) cite the body as the primary locus for cultivating mindfulness, including in the body internally and externally (Ṭhānissaro Bhikkhu, 2004). This emphasizes the importance of interoceptive and exteroceptive capacities including extending compassionate, relational awareness beyond self to all beings.

In light of this complexity, it seems plausible that misinterpretations have inadvertently created a false dichotomy between the terms presence and mindfulness, at least for some modern commentators. Given the richness and specificity of Buddhist psychological models, it also seems unlikely that a new state or faculty, untethered from these traditions, has been recently discovered.

The working definition of presence I present and discuss is:

> a state of embodied, mindful awareness that facilitates the emergence of implicit intelligence, transforming insight and a holistically attuned, integrated and responsive experience of self and world.

### *Capacity and Practice*

The effectiveness of an embodiment-focused coach depends on their personal capacities, developed and sustained through embodiment-specific practices.

Mindfulness practices are foundational for enhancing self-awareness, attentional control, and emotional regulation. They also deepen embodied presence, and somatic literacy: the differentiated, interoceptive awareness of the body's sensations, schema and operations. Additionally crucial are physical practices that foster an intimate interoceptive relationship with the body, including slower forms of yoga, some dance modalities, biofeedback and movement practices such as Tai Chi or Qi Gong (Claxton, 2015).

The coach's embodiment provides an important proximal model for the client, supporting the development of their own embodied capabilities within sessions. Integrating somatic practices into their personal developmental plans further bolsters their abilities. Through consistent and skilful application of embodied methods, and gradually increasing their depth and

intensity, the coach empowers the client to evolve greater confidence, fluency, and trust in their embodied abilities.

***The Three Domains***

These domains shown in Figure 1 illustrate three core areas for discussing embodied coaching practice.

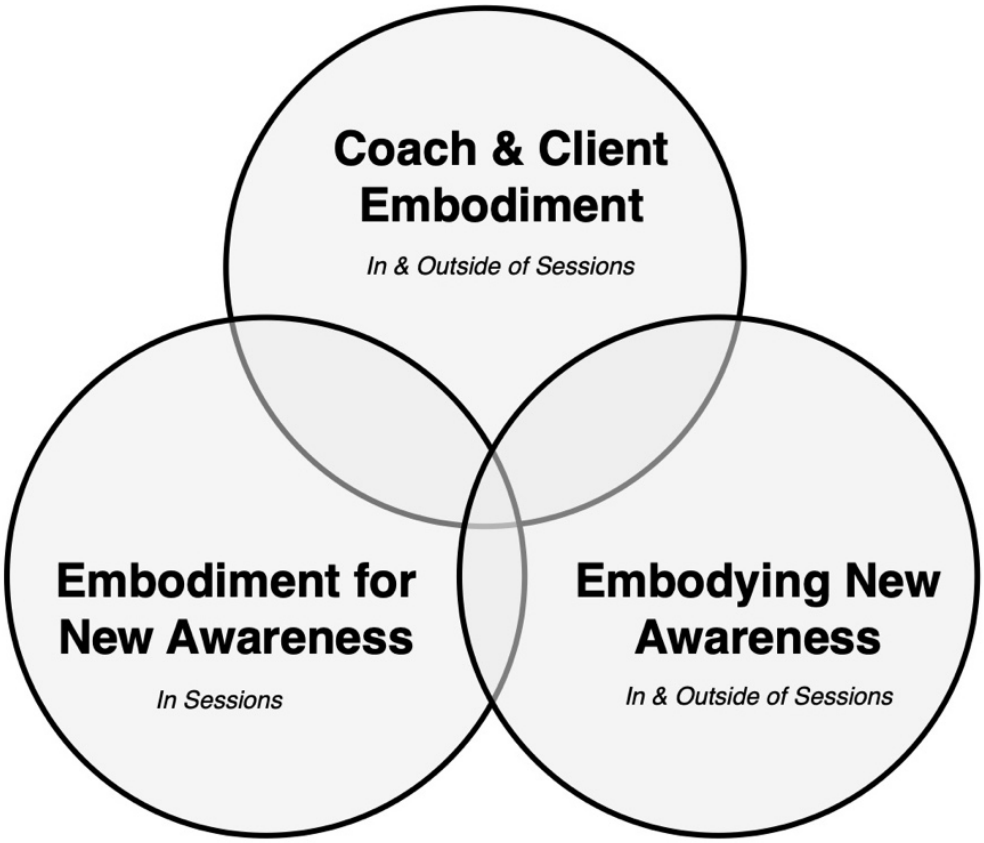


**Figure 1: The Three Domains. Note: Created by author to illustrate the three-domain model discussed in the text.**

*Client & Coach Embodiment:* This includes the coach's embodiment and commitment to ongoing practices, as well as their role in modelling, entraining and facilitating the client's embodiment. In-session rituals such as presencing optimize the coaching container, foster relational attunement, and support the client's ability to access and foreground their embodied cognitive aspects.

This domain also encompasses all the resources, somatic practices and developmental work (including therapies) which, while external to the coaching session, actively support the client's success within the coaching process.

*Embodiment for New Awareness:* Because coaching aims to support clients to generate insight, shift perspective, and achieve goals, this domain (bottom left of Figure 1) encompasses body-oriented methods for evoking new awareness.

These methods include techniques and interventions such as movement, postural changes, exploring gesture, parts work, metaphor enactment or reflectively interacting with the preconceptual "felt sense" in Focusing (Gendlin, 1978). These techniques offer access to implicit intelligence and perspectives that may not be reachable through verbal inquiry alone.

*Embodying New Awareness:* This domain (bottom right of Figure 1) addresses how clients integrate new capacities, mindsets, and insights physically – enacting and embodying them through behavior, expression and presence. It emphasizes not only knowing something new, but becoming someone new.

The process involves supporting clients to inhabit their shifts somatically, allowing their values, new perspectives or behaviors to become embodied traits rather than intellectual concepts. While behavioral rehearsal may be an early step, the ultimate aim is embodiment as a sustainable shift in being, not just doing. Transformation occurs at a holistic level and change is lived not merely performed.

### *The Levels of Awareness*

The chart in Figure 2 visualizes three descending levels of awareness and perception used within the model.

- *Thinking*. The explicit, conscious level of awareness encompassing conceptual and symbolic processing, linear logic, language, analysis and narrative construction. This is the primary terrain of conventional coaching methods which focus on conscious thought and rational insight.
- *Feeling*. Situated primarily in the gross body and exteroceptive senses, this includes emotions, posture, movement, shape and expressive somatic markers. It represents embodied emotional experience as directly felt in the physical body. Somatic coaching often begins to access this level through posture, gesture or movement-based inquiry.
- *Sensing*. This deepest level refers to interoceptive and proprioceptive awareness – the subtle, preconceptual realm of felt experience and implicit cognition. It includes gut feelings, felt senses and other meaningful yet difficult-to-name impressions that arise within the body. Practices such as Focusing (Gendlin, 1978) and body-oriented reflective work provide access to this often-underutilized dimension.

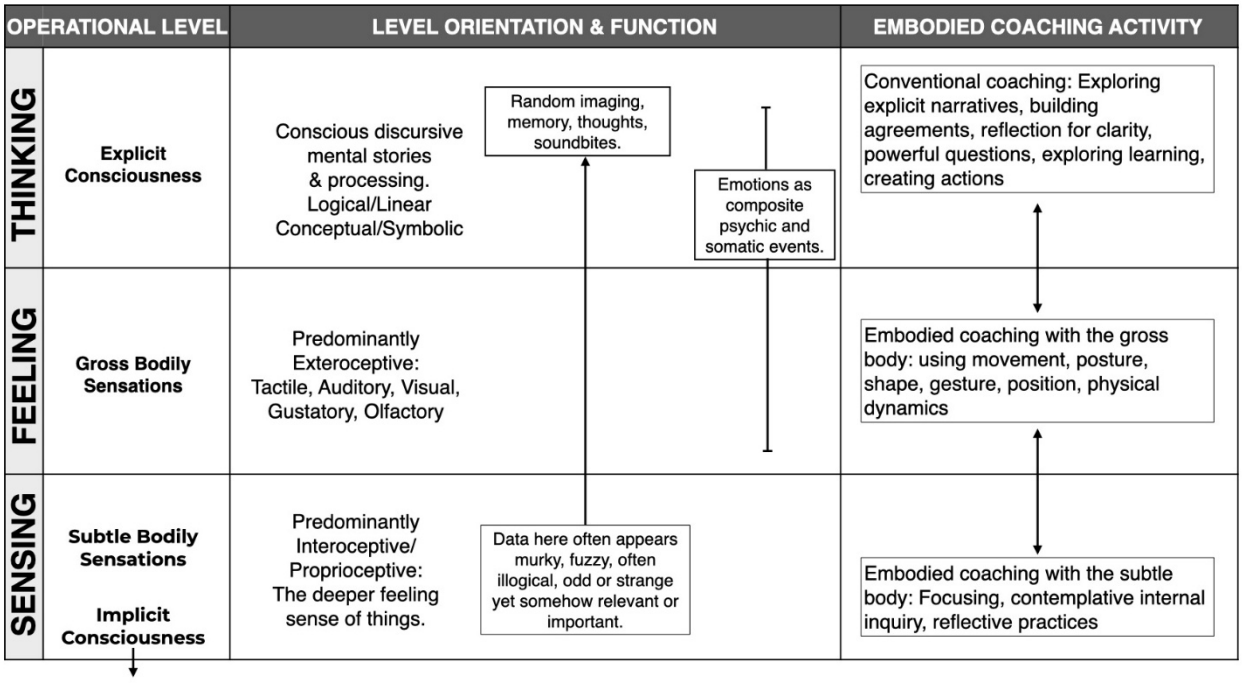


**Figure 2: The Levels of Awareness. Note: Diagram created by author to illustrate awareness levels for an embodied coaching model.**

### *The Embodied Avenues*

Visualized below (Figure 3) is a framework of seven avenues through which embodied exploration can occur within coaching: Postural, Kinaesthetic, Environmental, Linguistic, Affective, Reflective, and Interrelational. These domains draw from the theoretical and empirical foundations discussed earlier and offer a holistic view of the body's role in developmental coaching conversations.

These avenues are not discrete categories; rather, they often overlap and interweave in both experience and application. For example, a client may reflectively explore the emotional impact of a particular posture or gesture (Postural + Kinaesthetic + Affective) or engage with the subtle felt sense of language and meaning (Linguistic + Reflective), as in Gendlin's Focusing. Together, these avenues provide coaches with a versatile map for supporting deeper awareness, integration and embodied transformation.

| Avenue | Definition | Coaching Application | Range |
|---|---|---|---|
| **Postural** | Explores the body posture and it's relationship to and impact upon cognition including the embodiment of qualities and ways of being. (Awad et al, 2021; Elkjær et al, 2022) | Inviting client to explore or optimize posture as resource for shifting mindset, cognition ; embodying aspirational qualities (eg. values or strengths) in order to provoke and explore shifts of perspective; Inviting client to explore external resources (bodywork, somatic therapy etc.) for optimizing postural capacity. | Gross |
| **Kinaesthetic** | Explores the body in movement and motion including it's innate problem solving capacity and impact on creative thought. (Wilson & Golonka, 2013; Claxton, 2015) | Inviting the client to use movement, gesture etc. to embody issues including allowing it to generate solutions and responses to challenges and to act out potential goals; Use of movement within visualization practices in order to sense the body's choices. | |
| **Environmental** | Explores the body in its direct context including the impact of environmental, social and relational factors and location on cognition and perspective. (Abram, 2011; Yunkaporta, 2020) | Inviting client to explore different locations; exploring the relational body and the felt impact of others; using environmental cues to explore impacts on regulation, creativity and cognition (eg. inviting client to go outside, coaching in nature, using different backdrops etc.); engaging in chair work (change of placement) when exploring competing inner arguments or perspectives. | |
| **Linguistic** | Explores the embodied nature of language including the non-verbal and somatic nature of language and creative thought. (Lakoff & Johnson, 1999; McGilchrist, 2009 ) | Related to the above all aspects of body language and non-verbal levels of the client's conversation; Embodied metaphor and language practices which explore the impact of language on the body and the embodied source domains of the metaphor. | |
| **Affective** | Explores the emotional body for delineating affect and revealing underlying motivations, energy, conditioning, habit patterns and felt impact. (Siegel, 2020; Damasio, 1999) | Inviting the client to articulate or explore their somatically experienced emotional world to increase general EQ, Emodiversity and general self awareness and literacy; using the body as a register of the emotional impact of thoughts, concepts, topics or others to potentially reveal implict motivations, inclinations, biases or reactivity. | |
| **Reflective** | Explores the body as a locus and nexus of preconceptual thought and cognition. Includes use of body as an attentional focus for reflective inquiries. (Gendlin, 1978; Gendlin, 1993) | Use of techniques such as Focusing and other methods for exploring the Felt Sense that work at the the explicit/implicit edge; some versions of Parts Work; engaging reflective redirects into the body and invite the 'body to respond or offer an answer' to coach's questions or when client is 'stuck'. | |
| **Interrelational** | Explores the subtly interconnected body and its interrelatedness within broader systemic realms — human, animal, ecological, planetary etc. (Csordas, 2008; Abram, 2011; Yunkaporta, 2020) | Dialogues and embodied practices that support insight, exploration and contemplations of interconnectedness (interpersonal, ecological, universal) extending to Buddhist notions of non-self and non-duality and indigenous views of interdependence. | Subtle |

**Figure 3: The Embodied Coaching Avenues. Note: Model created by author outlining avenues for embodied coaching applications.**

### *The Model viewed through the 4E Lens*

Just as the embodied avenues discussed above in Figure 3 are not siloed competencies, but overlapping lenses through which human transformation can be engaged somatically in coaching, likewise are the four dimensions of 4E cognition mutually informing in applied practice.

To clarify:

- *Embodied*: Every avenue is grounded in the somatic substrate of experience. Postural, kinaesthetic, and affective domains most directly reflect how bodily processes shape meaning-making, emotional regulation, and insight. Even linguistic or reflective inquiry is modulated by tone, gesture, breath, and embodied attention.
- *Enacted*: Cognition and transformation do not arise solely through analysis, but through doing. Whether it's shifting posture, breathing, walking in a new environment, or speaking from a felt sense, each avenue invites action that brings inner processes into motion, highlighting the performative and participatory nature of knowing.
- *Embedded*: Embodied coaching interventions are always situated within social, relational, and ecological contexts. The environmental and interrelational avenues especially

foreground how bodies are entangled with their surroundings and shaped by invisible relational fields and place-based meaning systems (Yunkaporta, 2020).

- *Extended*: Cognition extends beyond skin and skull into space, tools, symbols, and collective meaning. In coaching, language (linguistic avenue), metaphors, objects, and spatial arrangements can function as cognitive scaffolds. Reflective tools such as Focusing or somatic metaphor also serve to externalize inner experience and distribute thinking into body, space, and symbols.

Rather than mapping each avenue – or for that matter, any of the other models or examples in this article – to a single 4E dimension, it is more accurate to say that each embodied coaching move generally draws on multiple 4E dimensions simultaneously. This fractal interrelationship of body, world, action and cognition helps explain why an embodied approach leads to more complete and durable change in ways traditional verbal inquiry cannot.

### *Explicit vs Implicit*

In this model, the terms explicit and implicit refer to two primary modes of consciousness, awareness, and processing. While these are sometimes loosely equated with conscious and unconscious, a more nuanced understanding is found in Eugene Gendlin's applied phenomenology (Gendlin, 1978, 1997). Drawing on and extending the work of Husserl and Merleau-Ponty (Behnke, 2024; Reynolds, 2008), Gendlin (1997) described the implicit as an embodied repository of one's vast and intricate knowing – felt, lived, preconceptual and vastly interconnected.

Whereas explicit processing is deliberative, logical, linear, and reliant on symbolic concepts, it is always referencing and emerging from the deeper, embodied complexities of the implicit. In other words, what we articulate consciously is grounded in a much broader field of embodied, pre-articulate experience.

It's important to note that less deliberative forms of knowing including hunches, gut feelings, and intuitions are not always accurate, and are often influenced by implicit bias or conditioned habit patterns (Tversky & Kahneman, 1974). However, research has shown that intuitive processes can outperform explicit reasoning in many contexts (Gigerenzer, 2007).

Nonetheless, the aim here is not to replace one mode with the other, but to integrate them. Explicit, reasoned logic remains essential for critical reflection, testing, and verifying data, including the embodied wisdom of the implicit, before decisions are made and enacted.

## Applying Embodiment in Coaching

While a comprehensive account of applied embodiment-based coaching techniques is beyond the scope of this article, the following examples illustrate how embodiment can be applied.

### *Coach & Client Embodiment*

In addition to the coach's personal embodiment practices, introducing embodied presencing practices when beginning sessions yields several benefits:

1. *Heightening somatic awareness:* Reflective practices using prompts such as "Sensing life arising through your body right now," or "Feeling how it is to be you in this moment" help clients attune to subtle and gross bodily experiences alongside mental processes.
2. *Grounding and centering:* Guiding attention to the embodied sensations of gravity supports a sense of physical grounding and balance, which contributes to greater parasympathetic activation and enhances executive functioning. The same prompt can also be broadened to invite reflection on the physical felt connection to the earth and to others through our shared somatic experience of gravity.
3. *Embodied goal alignment:* Inviting clients to reflectively allow their coaching goals to "take shape in the body" and prompting: "Perhaps asking into your body: what might be a great focus for today?" fosters a holistic alignment between agreed goals, intention and embodied awareness.

### *Embodiment for New Awareness*

1. *Direct body inquiry:* Asking, "What does your body say about this?" redirects attention from habitual cognition to embodied responses – emotions, sensations, intuition – that may contradict or enrich rational conclusions.
2. *Embodied perspective shifting:* Movement and change of environment (e.g., stepping outside or standing at a window) can offer literal shifts in perspective, supporting greater mental flexibility and clarity.
3. *Focusing:* Clients explore felt senses of situations through coach-facilitated reflection, allowing preconceptual knowing to unfold into insight and resolution.

### *Embodying New Awareness*

1. *Literalizing metaphor:* When clients use movement-based language ("step into my power," "stand up for myself"), they can be invited to physically enact these metaphors in session, deepening experiential insight.
2. *Post-session practices:* Designing intentional body-based practices (e.g. breath, posture, movement) helps shift conditioned patterns and anchor new responses neurologically and behaviorally.
3. *Embodied rituals:* Personal rituals, such as burying an object that symbolizes an old behavior, offer powerful ways for clients to mark turning points and reinforce transformation somatically.

## Discussion

While embodiment acknowledges the simple fact that to be human is to have a body, in this theoretical exploration I have argued that the body is far more than a dualistic fleshy vehicle for our higher cognitive functions. Drawing on 4E theories, which frame mind and cognition as

embodied, enacted, embedded, and extended, this work has highlighted the body's essential role in shaping consciousness, insight, and transformation. It has emphasized the interrelational, embodied and contextual nature of mind (Siegel, 2020), while introducing thinkers like Lakoff and Johnson (1999) who show that a vastly larger implicit, embodied process lies beyond the explicit cognitive horizon.

The body is not only central to experiencing the world, but also the nexus through which we access our deeper dimensions of intelligence, meaning-making, and selfhood.

Though research now clearly affirms the value of intuitive, sensory, and embodied forms of cognition (Claxton, 2006), such perspectives remain marginal in many professional domains, including coaching. Western academic sensibilities have long privileged abstract reasoning and linear logic, often at the expense of our other modes of knowing. This bias has also quietly shaped the competencies and expectations of coaching practice.

Yet, as we've explored throughout this article, the science, theory, and practices now exist to begin redressing that imbalance.

**Future Directions**

While this article presents a theoretical and practice-oriented framework, it opens several promising pathways for further investigation.

Future research could examine how embodied coaching interventions affect client outcomes such as sustainable behavioral change, subjective wellbeing and life satisfaction. Quantitative studies might track these effects over time, while comparative studies could assess the effectiveness of somatic techniques versus traditional cognitive-verbal ones across different client populations or coaching contexts.

Qualitative studies could illuminate the client's lived experience of an embodied coaching approach, particularly its perceived effectiveness in helping them physically integrate insights into life beyond the session.

To empirically ground the proposed framework, researchers might explore methods for validating coaching effectiveness across the seven embodied avenues (e.g. through client self-report, physiological measures or observation). Questions worth pursuing could include: Which avenues are most impactful in different coaching scenarios and/or varying client populations? What practitioner factors most influence client outcomes; for example, the coach's level of personal embodiment practice, familiarity with somatic techniques, or confidence in applying them?

Finally, as AI and non-human technologies increasingly enter coaching-adjacent domains, research could help better articulate and validate the crucial importance of uniquely human capacities such as embodied presence, Siegel's notion of attunement (Siegel, 2020) and Csordas' of intercorporeality (Csordas, 2008) cited earlier, that remain irreducible to algorithmic replication. Defining and evidencing these competencies may be crucial for ensuring the continued relevance of human coaches in an evolving technological landscape.

## Conclusion

In this current age of phenomenal technological advances, AI's rapidly evolving capacity to emulate human processes is sweeping aside many roles previously considered the sole preserve of human skills. Coaching will not remain immune to this advance. Yet reducing the delightfully unpredictable magic of felt, human interactions to an algorithm merely reinforces the here disproven narrative that humans are no more than machines.

This article has challenged this reductionist view by foregrounding embodiment as an irreducible human capacity. Rather than rejecting existing practices, it invites coaches and the profession's gatekeepers to deepen their connection with the intuitive, relational and sensory depths of what it means to be human. In doing so, it's been shown that practitioners can leverage far more of their own and their client's potential for growth, development and transformation.

Crucially, an embodied approach doesn't discard established methods or competencies; it simply asks the industry to make room for the implicit, the intuitive, the animal and the wild within them. It invites coaches to relax their grip on habitual techniques and embrace the messy complexity of their humanness, calling us all back into relationship with the body and its true animal nature – not as object, but as participant in a vast, interdependent ecology of being, knowing and experiencing.

Contrary to the modern enthusiasm for individualism and notions of the body as a boundary between self and world, embodiment reveals it as a bridge. Whether we look to Husserlian intersubjectivity (Behnke, 2024), Csordas' intercorporeality (Csordas, 2008) or Abram's ecological body as "an unfinished entity utterly entwined with the soils, water, and winds" (Abram, 2011. p.110), a common thread emerges: we belong to one another, and to the world, through the body.

Viewed thus, and through the case established in this theoretical and conceptual article, embodiment offers a singularly powerful path forward for coaches who wish to radically deepen their impact, while affirming the profoundly human and interdependent nature of their craft.

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**Disclosure statement**

The author reports there are no competing interests to declare.

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