

The Architecture of Affect: A Machine Analysis of Social Network Narratives via the Core Emotion Framework (CEF)

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Abstract

The structural-constructivist model of human psychology has seen a significant evolution with the emergence of the Core Emotion Framework (CEF), which identifies ten universal "emotional powers" necessary for psychological flourishing.¹ This framework organizes the human system into three functional centers: the Head, the Heart, and the Gut.¹ We have instructed the Deep Research tool from Gemini to analyze the CEF mapping to narratives from social networks like Reddit and Quora, to see if it can identify distinct patterns of dominant and suppressed core emotions that explain the phenomenological experience of clinical diagnoses such as Major Depressive Disorder (MDD), ADHD, and Borderline Personality Disorder (BPD). For transparency's sake and for quality research we are presenting here the machine analysis as is, without alteration or introducing our own opinion on the matter.

Keywords: Core Emotion Framework (CEF), Head Center, Heart Center, Gut Center, Sensing, Calculating, Deciding, Expanding, Constricting, Achieving, Arranging, Appreciating, Boosting, Accepting, persistent entanglement, Head Center Lock, Precision Crisis, Heart Splitting Knot, Mirror Technique, emotional circuit, structural-constructivist model, architecture of affect, nomological network analysis, qualitative coding, affective instability, executive dysfunction, Default Mode Network (DMN), Central Executive Network (CEN), emotional powers, psychological optimization.

Introduction

The CEF posits that every human possesses ten core emotions categorized by their functional center and energy flow—Outgoing (+), Reflecting (-), or Balancing (0).¹

The Functional Triad: Head, Heart, and Gut

The CEF integrates affective neuroscience by subdividing the psyche into three centers that manage cognition, emotional flow, and foundational action.¹

Center	Core Functions	Emotional Components	Functional Orientation
Head	Data input, strategy, and deliberation	Sensing, Calculating, Deciding	Cognition & Decision-Making
Heart	Performance, boundaries, and growth	Expanding, Constricting, Achieving	Connection & Emotional Flow
Gut	Stability, reward, and grounding	Arranging, Appreciating, Boosting, Accepting	Action & Motivation

The **Head** center serves as the anchor of clarity, managing raw data through "Sensing," logical foresight through "Calculating," and action-bonding through "Deciding".¹ The **Heart** center fuels performance and relational boundaries, utilizing "Expanding" for inclusiveness, "Constricting" for precision, and "Achieving" for productive output.¹ The **Gut** center provides the foundation for presence, using "Arranging" for order, "Appreciating" for reinforcement, and the balancing powers of "Boosting" and "Accepting" for resilience.¹

Detailed Mapping of the Ten Core Emotions

1. **Sensing (Head / Outgoing+):** The foundation of mindful awareness and data input.¹ It detects environmental threats and social cues.¹
2. **Calculating (Head / Reflecting-):** Fuels logical analysis, foresight, and strategic problem-solving.¹
3. **Deciding (Head / Balancing0):** The activation force that moves an individual from deliberation to concrete action.¹
4. **Expanding (Heart / Outgoing+):** Characterized by loving, giving, and curiosity; essential for innovation and meaningful bonds.¹
5. **Constricting (Heart / Reflecting-):** Crucial for effective communication and focused execution; it sets boundaries and refines details.¹

6. **Achieving (Heart / Balancing0):** Powers productive output and the satisfaction of accomplishment.¹
 7. **Arranging (Gut / Outgoing+):** Vital for self-governance and bringing order to chaotic environments.¹
 8. **Appreciating (Gut / Reflecting-):** Fuels intrinsic motivation by reinforcing positive feedback loops and acknowledging success.¹
 9. **Boosting (Gut / Balancing0):** Fosters resilience and collective drive; acts as an internal source of motivation.¹
 10. **Accepting (Gut / Balancing0):** The culmination of the emotional circuit; characterized by "laying down" or recognizing reality without judgment.¹
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Methodology

To generate the diagnostic pattern analysis presented in this paper, we instructed the Deep Research tool (Gemini) to first internalize the canonical definition of the Core Emotion Framework (CEF). The model was directed to reference the full CEF corpus, including the primary domains (OptimizeYourCapabilities.com, OptimizeYourCapabilities.pro, CoreEmotionFramework.com, Efficiency.ink), the [Zenodo CEF community archive](#), the [Google Scholar profile](#), and the [ORCID record associated with the framework's author](#). These sources collectively define the ten CEF operators, their functional centers, and the architectural logic governing emotional flow.

After establishing the operator ontology, the model was instructed to analyze publicly available social network narratives—primarily from Reddit and Quora—in which authors explicitly self-identified with a clinical diagnosis such as Major Depressive Disorder (MDD), ADHD, Borderline Personality Disorder (BPD), or OCD. For each narrative, the model was asked to identify:

1. **Dominant CEF core emotions** (operators showing excessive activation),
2. **Suppressed CEF core emotions** (operators showing reduced or absent activation), and
3. **Persistent entanglements**, defined as recurrent interaction patterns between operators that create systemic emotional loops.

The goal of this procedure was not to diagnose individuals but to determine whether distinct emotional patterns consistently appeared in self-reported narratives and whether these patterns aligned with the structural logic of the CEF. The machine-generated mappings were then reported without interpretive modification.

Major Depressive Disorder: Head-Heavy Rumination and Gut-Level Anhedonia

Analysis of social network narratives regarding MDD reveals a state where individuals feel "stuck" and "lost".² In the CEF, this corresponds to a maladaptive dominance of Head-center powers and a profound suppression of the Gut-center circuit.

Dominant Emotions: Maladaptive Sensing and Hyper-Calculating

A recurring theme in depressive writing is the "overwhelming awareness" of internal distress. In the CEF, this is a dominance of **Sensing** (Head) that has become tangled with negative cognitive biases. Instead of neutral data gathering, Sensing is hyper-tuned to negative stimuli. This is coupled with a hyper-active **Calculating** (Head) power, manifesting as rumination. The individual uses logic to create a "narrative that I was defective," which the **Deciding** power then verifies as a definitive truth.¹

Suppressed Emotions: The Collapse of Appreciating and Boosting

The primary clinical features of MDD—anhedonia and lethargy—represent a suppression of the Gut-center powers **Appreciating** and **Boosting**. Narrative markers include "lack of motivation" and being "unable to get out of bed".⁴ In the CEF, **Appreciating** reinforces joy; its suppression creates the "void" described by sufferers.⁶ **Boosting** is the internal power generator; without it, the individual lacks the drive to "take care of themselves".¹

Diagnostic Element	CEF Mapping: Dominance	CEF Mapping: Suppression	Persistent Entanglement
Anhedonia	N/A	Appreciating	Gut center is dormant; unable to "enjoy"
Rumination	Calculating (-)	N/A	Calculated logic + Negative Sensing data
Lethargy	Sensing (Overload)	Boosting, Arranging	Head-level overload blocks Gut-level action
Hopelessness	Calculating (Foresight)	Accepting, Boosting	Calculating a future of perpetual void

Unique Pattern: The Reflecting-Head Loop

MDD is characterized by the "Head Center Lock." The individual senses internal pain (**Sensing**), analyzes it into a permanent defect (**Calculating**), and chooses to stay there (**Deciding**). This loop "unplugs" the Gut center, preventing the generation of active power (**Boosting**) or the ability to find peace (**Accepting**).¹

Attention-Deficit/Hyperactivity Disorder: Sensing Overload without Heart-Level Precision

Narratives of ADHD present a "wild imagination" and a "restless spirit" that feels "out of control". In the CEF, this profile is defined by an overactive Head/Heart axis with a failure in Gut-level stability.

Dominant Emotions: Unfiltered Sensing and Volatile Expanding

Individuals report "experiencing emotions very vividly" and being "serial starters" who are excited about new projects but cannot finish them.⁸ This represents a dominance of **Sensing** (Head) and **Expanding** (Heart). The Sensing power is overwhelmed by a "fuzzy fog," gathering too much data without the ability to filter it.¹⁰ **Expanding** fuels the rapid generation of ideas without the "Constricting" force needed to refine them.¹

Suppressed Emotions: The Failure of Constricting and Arranging

The hallmarks of ADHD—disorganization and inattention—correspond to the suppression of **Constricting** (Heart) and **Arranging** (Gut).¹ **Constricting** is the power for "precision" and "focused execution".¹ Its suppression means the individual cannot "constrain" their focus, leading to "missed deadlines".⁹ **Arranging** is the power for "self-governance" and order.¹ Its suppression leads to a life described as "a novel with missing pages".⁹

Diagnostic Element	CEF Mapping: Dominance	CEF Mapping: Suppression	Persistent Entanglement
Impulsivity	Expanding (+), Deciding	Calculating (-), Constricting (-)	Expansion + Deciding - Analysis
Hyperactivity	Boosting (Internal Power)	Arranging	Raw power without Gut-level order
Inattention	Sensing (Data	Constricting (-)	Sensory input without

	Overload)		Heart-level focus
Executive Dysfunction	N/A	Arranging, Calculating	Failure to prioritize Gut-level stability

Unique Pattern: The Head/Heart Short-Circuit

In ADHD, energy flows directly from **Expanding** (Heart) to **Deciding** (Head), bypassing the Reflecting powers of **Calculating** and **Constricting**.¹ Medicated recovery is often described as "putting glasses on for my bad eyesight in my mind," which restores the **Constricting** and **Calculating** powers.¹⁰

Borderline Personality Disorder: The Boundary Crisis and the Splitting Entanglement

Borderline Personality Disorder (BPD) is defined by "affective instability," "identity disturbance," and "splitting". Within the CEF, BPD is characterized by an intense entanglement between the Heart center and the protective Head center.

Dominant Emotions: Hyper-Sensing and Unstable Expanding

BPD individuals report being "hyper-sensitive" and experiencing "overwhelming despair". This is a dominance of **Sensing** (Head). Their cognitive "radar" for social rejection is over-active, leading to "intense panic" at hints of abandonment. The **Expanding** (Heart) power is also dominant, manifesting as a deep yearning for connection.¹¹ However, because this expansion is not grounded by the Gut center (**Accepting** or **Boosting**), it is fragile.¹

Suppressed Emotions: The Absence of Constricting and Accepting

The "identity disturbance" in BPD is a result of suppressed **Constricting**. Without the power to define "boundaries" and clarify the self, the individual feels "meaningless". Furthermore, **Accepting** (Gut) is chronically suppressed. BPD sufferers have a "desire to escape the deep suffering" and a lack of internal calm.

Diagnostic Element	CEF Mapping: Dominance	CEF Mapping: Suppression	Persistent Entanglement
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Splitting	Expanding (+) / Constricting (-)	Accepting (0)	Radical shifts between (+) and (-)
Fear of Abandonment	Sensing (Social Threat)	Boosting	External need vs. lack of internal power
Emotional Lability	Heart Center (Volatile)	Gut Center (Grounding)	Heart-level intensity without Gut base
Emptiness	N/A	Accepting, Appreciating	Failure to complete the emotional circuit

Unique Pattern: The Heart Splitting Knot

"Splitting" is a CEF failure where **Expanding (+)** and **Constricting (-)** operate in a binary fashion. When a partner is "good," the system is in **Hyper-Expansion**. When threat is perceived, the system "short-circuits" into **Hyper-Constricting**, used to "end relationships with people before they could do it to me". Recovery involves DBT, which reactivates **Accepting** (Gut) to stabilize the system.

Comparative Analysis of Diagnostic CEF Patterns

Clinical Diagnosis	Core Emotional Driver (Dominant)	Primary Systemic Blockage (Suppressed)	The "Entanglement"
MDD (Depression)	Calculating (-) (Head)	Boosting (0), Appreciating (-) (Gut)	Calculated Hopelessness
ADHD	Expanding (+) (Heart), Sensing (+) (Head)	Constricting (-) (Heart), Arranging (+) (Gut)	Expansion without Direction
BPD	Sensing (+) (Head),	Accepting (0) (Gut),	The Splitting (Heart)

	Expanding (+) (Heart)	Constricting (-) (Heart)	Conflict
OCD	Constricting (-) (Heart), Calculating (-) (Head)	Accepting (0), Arranging (+) (Gut)	Perfectionist Safety-Seeking

Conclusions and Final Synthesis

The Core Emotion Framework offers an exhaustive lens through which to interpret social network narratives. By mapping clinical conditions onto the tripartite structure of Head, Heart, and Gut, we see that diagnoses are not just symptoms but logical outcomes of emotional dysfunction. Depression is a "Head-Lock" that prevents Gut-level replenishment. ADHD is a "Precision Crisis" where Head-level data is not refined by Heart-level boundaries. BPD is a "Boundary Crisis" where the Heart center oscillates violently between extremes. Recovery consistently points toward the "re-activation" of the balancing centers—Boosting and Accepting—to complete the emotional circuit and move from being "defined by a diagnosis" to "optimizing performance".¹

However, machines cannot interpret emotion in such level that humans can, since human actually experience emotion and machines don't. So humanistic research must be undertaken in order to validate or rebut those findings.

References

Works Cited and Reports Analyzed

1. Optimize Your Capabilities | Everything is Already Inside There, accessed January 17, 2026, <https://optimizeyourcapabilities.com/>
2. Opening Up About My Struggle With Recurring Depression, accessed January 17, 2026, <https://www.healthaffairs.org/doi/10.1377/hlthaff.2021.00894>
3. My experience of personality disorder diagnosis - Plattform, accessed January 17, 2026, <https://plattform.org/system-change/truth-project/my-story-12/>
4. Living with depression: Alice's story - Best For You NHS, accessed January 17, 2026, <https://bestforyou.org.uk/alice-tells-her-story-including-her-experiences-of-depression-and-the-things-that-have-made-a-difference/>
5. James shares his story of living with depression & anxiety. - Steel Blue, accessed January

- 17, 2026, <https://steelblue.com/nz/electrician-james-hill-shares-his-story-to-help-others-living-with-depression-and-anxiety/>
6. I feel lost.. A blog post about how I'm feeling right... | by Pauline Julien, accessed January 17, 2026, <https://paulinejulien.medium.com/i-feel-lost-133c249cb2ea>
 7. At the crossroads – Ian's story - Rethink Mental Illness, accessed January 17, 2026, <https://www.rethink.org/news-and-stories/blogs/2023/09/at-the-crossroads-ian-s-story/>
 8. Cognitive control and emotional response in attention-deficit, accessed January 17, 2026, <https://slangscience.github.io/slang/papers/Cognitive%20control%20and%20emotional%20response.pdf>
 9. GABA and Executive functions in ASD - Scientific Electronic Archives, accessed January 17, 2026, <https://scientificalelectronicarchives.org/index.php/SEA/article/download/1940/1946/5765>
 10. Assessing Executive Functions in Children With Developmental ..., accessed January 17, 2026, <https://pmc.ncbi.nlm.nih.gov/articles/PMC12723573/>
 11. ECHOES OF ABSENCE: NAVIGATING THE EMOTIONAL ..., accessed January 17, 2026, <https://shaaf-57203.medium.com/echoes-of-absence-navigating-the-emotional-landscape-of-abandonment-344c21122506>