

**Symbiotic Psychology: The Synergy Between
Mind, Body, Emotions, and Consciousness**

**Emotions-as-Effect and
Emotional Control Theory:
The Linguistic Semantics of
Emotional vs. Cognitive
Dysregulation**

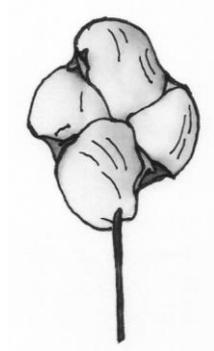
(rev2022-05-26a)

By: Andrew O. Jackson

Do not fixate on the broken and mangled hand, for it is indeed a soreness to any beholder. The message is not within the hand, nor within the moon and stars at which it points, but rather lies within another universe that surrounds us known only through its quiet revelations.

**Emotions-as-Effect and
Emotional Control Theory:
The Linguistic Semantics of
Emotional vs. Cognitive Dysregulation
(rev2022-05-26a)**

Andrew O. Jackson



Gossypium
(cotton plant)

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Cover Photo: "*Between the Isles*"

Andrew, with his wife Barbie and their two cats, Mindy and Jennifer, spent four summers "gunkholing" the north shore of Lake Huron, one of the Great Lakes between the United States and Canada. This is a photo of their sloop "*NorthStar*" anchored between the North and South Benjamin Islands of the North Channel. Photo courtesy of Andrew O. Jackson.

*Not until the illusion of emotions is understood
will the power of emotions be revealed.*

Emotions are felt. Emotions feel good, or not. Joy feels good. Anger does not. Love feels good. Hate does not. Emotions are the perception of physiological changes and states within the brain and body we feel. We feel anger; we feel love; we feel joy... all of which have some corresponding cognitive process and associated physiological state of being that feels good, or not.

Because emotionally feeling good has an evolved correlation with health, well-being, and success (and emotionally feeling bad has an evolved correlation with their negation), we have evolved to be joyous beings. If your cognitive activities (perceiving, conceiving, remembering, reasoning, judging, imagining, and problem-solving) don't feel good, they aren't... for you or those around you. The key (to health, well-being, and success) is to learn and develop the skills, abilities, and beliefs necessary to re-process emotionally negative cognitive activities into emotionally positive cognitive activities. There is a magnificent oneness and soul within creation that only the heart and mind working together in symbiotic harmony can realize.

Emotion does not drive behavior as literature portrays in its poetic dance.

Emotion is first an effect, a reflection and awareness within the mind providing another dimension to its cognitive memories, thoughts, beliefs, logic, and imaginations that precipitate the neurological and biochemical physiology in the brain and body that is driving behavior.

*The linguistic semantics of emotional control, as commonly used in literature, religion, science, law, and philosophy, means to manage, restrict, and regulate emotions because emotions are perceived as **causal** to neurological, biochemical, and physiological changes within the brain and body that drive behavior. Within the linguistic semantics in engineering control theory, emotional control means emotions are being regulated and managed as an end product of a system. Emotions are the result of, a consequence of, or **an effect** of cognitive behavior precipitating the individual's neurological, neurological, and biochemical physiology in their brain and body. Where emotions have traditionally driven self-indulgent behavior, emotions are now being cultivated as feedback to enhance healthy, constructive, and successful behavior.*

Rather than demonizing emotions as aberrant, destructive, out-of-control, and in need of regulation because of an emotional disorder, the emotions-as-effect theory understands emotions as an evolved sensory system (akin to the sense of pain) giving conscious feedback on a neurological and biochemical, physiological state of being. Cognition, not emotions, precipitates the neurological, neurological, and biochemical physiology of the brain and body that drives behavior. Instead of being regulated by cognitive behavior, emotions are used to guide cognitive behavior and decision-making to enhance the individual's health, well-being, and success.

Current cognitive-behavior therapies (CBTs) are based on the erroneous belief that emotions are causal to biochemical, physiological changes within the brain and body. Because of this inaccurate and false paradigm of aberrant and dangerous emotions, it is concluded that emotions must be controlled, managed, and regulated, even with the use of pharmaceuticals if necessary. The dysregulation of cognition, not emotion, causes the aberrant changes in an individual's neurological and biochemical physiology that leads to suicidal depression, psychotic mania, and dysfunctional neurological and biochemical physiology susceptible to disease and illness. Cognitive-behavior therapies work because cognition changes the neurological and biochemical physiology that is then perceived as emotions.

Ignorance is to speak of desire itself as the cause of suffering rather than understanding that it is the continual cognitive activity upon the lack of that which is desired that is the cause of suffering.

Preface

Because of observability and measurability in humans and animals, there is much emotional research revolving around fear. But fear, with its many philosophical constructs and corroborative research and arguments, is only one aspect of the emotionally negative feeling side of a three-sided neuroplastic coin where all three sides have evolved and function together as a unit in symbiotic harmony for the health, well-being, and success of the individual. What can be reasonably understood and concluded about the pathological world of aberrant and destructive negative emotions without integrating the other two sides?

The opposing good feeling side is joyful with its supporting neurological and biochemical physiology. Whereas negative cognitive-emotional feelings such as fear, sadness, anger do, in the short-term function as a much-needed survival mechanism, I contend that the cognitive-emotional positive and joyful state of being is the natural resting state because of its unique long-term evolved correlation to health, well-being, and success and to a healthy, robust neurological, biochemical physiology. Yet, without the regulatory function of depression, pathological mania can destroy the system.

The third side of the coin is the necessary cognitive-emotional dynamic process control and regulatory mechanism between the two sides. This network has evolved and now functions to maintain an individual's health, well-being, and success. But the neuroplastic brain will reinforce (to the point of failure) those process networks, whether pathologic or salubrious, that continue to be environmentally stressed, especially through adolescent development.

Engineering closed-loop process and regulatory control theory is used to diagram and understand the dynamics of cognitive-emotional control theory where emotional awareness can consciously regulate the manic-depressive balance of an individual where either getting



a) stationary



b) balls-out regulating airflow

As the balls (upper right coordinate) swing in and out due to centrifugal force when the engine slows down or speeds up, the mechanism opens and closes an internal valve that regulates the airflow to maintain the engine's speed within operating limits. Steam engine built by Lyle Peterson, aka 565tubalcain, (mrpete222, 2019)

Figure 1: Fly-Ball Centrifugal Governor (Speed Controller, Manager, or Regulator)

too manic or too depressed is disruptive and leads to pathological (neurological, biochemical, and physiological) conditions and behaviors.

The conscious experience of emotions is a combined and perceived effect of neurological, biochemical, and physiological changes and states of being within the brain and body precipitated by cognitive activities. Because good feeling cognitive-emotional behavior has an evolved correlation with a healthy, robust, and vigorous neurological and biochemical physiology, and negative bad-feeling cognitive-emotional behavior with their negation, emotions have evolved and now functions as a conscious control and regulatory mechanism to guide re-processing cognitive behavior towards individual health, well-being, and success. Cognitive-emotional health education in psychotherapeutics (as well as in pre-school, primary, and secondary curriculums) is necessary to develop individual skills, abilities, and beliefs in re-processing emotional negative feeling cognitive behavior into emotional positive feeling cognitive behavior.

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1.0 Introduction

1.0 Introduction

Homer's *Iliad* opens with the line, "Goddess, sing me the anger [wrath] of Achilles, Peleus' son, that fatal anger [wrath] that brought countless sorrows on the Greeks and sent many valiant souls of warriors down to Hades, leaving their bodies as spoil for dogs and carrion birds: for thus was the will of Zeus brought to fulfilment" (Homer, 800-700/2009). With these words written almost 3000 years ago, Homer linguistically sabotaged hundreds of millions of years of emotional evolution. The civilized arena was staged for aberrant emotion to drive destructive behavior.

Achilles' *anger* brought countless sorrows. Achilles' *anger* sent many valiant souls to Hades. Homer inscribes the emotion anger as causal; anger is the cause of Achilles' behavior. This cognitive-emotional linguistic construct ignores emotion's evolutionary role in re-processing cognitive behavior towards an individual's health, well-being, and success. The paradigm of destructive behavior arising from emotional dysregulation (instead of cognitive dysregulation) erroneously demands emotional regulation, management, and control (even with the use of pharmaceuticals if necessary) to the detriment and cultivation of language, literature, philosophy, religion, law, and education, and limits the efficacy of modern evidence-based therapeutics in the psychological and medical rehabilitative sciences.

The perception of aberrant and dangerous emotions is analogous to the perception of the pain of your hand when placed on a hot stove. The solution is not to control, regulate, and manage the pain from your burning hand but to remove your hand from the hot stove. Because of the existing cognitive construct of emotions, practitioners infer emotions must be controlled, managed, and regulated, even with pharmaceuticals. But, like the burning hand

on the hot stove precipitates dangerous neurological and biochemical physiology that is perceived as pain, cognitive behavior precipitates the dangerous and aberrant neurological and biochemical physiology within the brain and body that is perceived as emasculating emotions, moods, and feelings. As the physical pain brings to conscious awareness of a potentially debilitating physical condition, emotions bring to conscious awareness of potentially debilitating cognitive activities occurring within the mind. Instead of controlling, managing, and regulating emotional behavior, emotions guide, control, and re-process cognitive behavior. Emotions change (and are “controlled”) because the cognitive behavior that changes the neurological and biochemical physiology in the brain and body that consciousness perceives as emotions changes.

“Emotional control” entails opposite cause-and-effect conceptualizations. Emotional control (as commonly used in literature, religion, science, law, and philosophy) means managing, restricting, and regulating emotions because emotions *are causal* to neurological, biochemical, and physiological changes within the brain and body that drive behavior. In engineering control theory, “emotional control” means emotions are an end product of a system, *an effect* that can be used as feedback to the system to accentuate good feeling cognitive activities.

It is cognition, not emotion, that precipitates the physiological states and changes within the brain and body that drive behavior. The dysregulation of cognition is the foundation of mental illness, disorder, and destructive behavior, and it is cognition that must be regulated, controlled, and managed. Emotions are first an effect, the perception of a neurological and biochemical physiology of the brain and body precipitated by cognitive

1.0 Introduction

behavior. And then second, emotions become causal and drive either self-absorbed and reckless behavior or a constructive and cultivated behavior depending on one's education, training, and beliefs and their ability to evaluate, re-process, and "guide" cognitive activities towards (hopefully) those that accentuate health, well-being, and success.

Emotions-as-effect theory reconstructs the evolutionary bases of good-feeling emotions as the conscious perception of healthy and robust neurological and biochemical physiology (and bad-feeling emotions with their negation) within the body and the brain precipitated by an evolved cognitive neural circuitry. Emotions, moods, and feelings are first an effect, the perceptions of an internal state of physiology precipitated by cognition. The causal nature of Homer's emotions, feelings, and moods is a carefully nurtured neurolinguistic and cognitive construct of the mind passed down through generations ignoring and bypassing emotions as a biofeedback control mechanism and their evolutionary correlation with an individual's neurological, biochemical, and physiological state of health and well-being.

Psychological and pharmaceutical therapy must be about cognitive-emotional development, i.e., the education and training of an individual to develop their skills, abilities, and beliefs needed to use their emotions as they have evolved. Primary school literary and cognitive-emotional health education must include both the traditional linguistic semantics of emotionally driven behavior for its experiential value and growth potential within the vicarious living of others (be they real or fictitious) and the linguistic semantics of emotional control behavior in the engineering sense where emotions are used as feedback to guide and re-process thoughts, memories, perceptions, imaginations, and logic of the cognitive mind

towards the individual's health, well-being, and success (as indicated by good feeling emotions, moods, and feelings).

2.0 Significant Knowing and Awareness: “But it’s a talking dog!”

(Movie *Up*, Doctor & Peterson (2009))

A barn is seen in the distance while driving through rural Wisconsin. Is it a barn or a Hollywood set built on location? (Fred Dretske, circa 1970s, University of Wisconsin class discussion of the Gettier Problem.) A philosopher of epistemology may give one answer, but is knowledge solely a function of the mind without the emotional experience? What if you are an artist painting a rural Wisconsin landscape, an author writing a novel, an Illinois tourist, or a farmer? And even then, what may traditionally be defined as a real barn, a modern dairy farmer may disagree because it lacks the modern amenities he needs to run the farm as a business; and a Hollywood director filming a late nineteenth-century saga may view such a real barn with disdain.

The cognitive mind deals with thinking – with thoughts of awareness and knowing. Cognition also deals with the processes of awareness and knowing such as perceiving, conceiving, remembering, reasoning, judging, imagining, and problem-solving (APA, 2020)., where understanding and comprehension can project future consequences and events. As a character in a movie treks through the woods, he perceives recent tree trunk scratches, disturbed bark, and broken branches. As he imagines the possibility of a bear rumbling

 2.0 Significant Knowing and Awareness: “But it’s a talking dog!”

through in search of food, he freezes in fear and begins to tremble at the sight of a very protective mother bear with her cubs in a thicket of freshly ripened blueberries.

Cognitively speaking, this character first *perceived* a motion in a thicket of blueberries, second, *recognized* it as a bear with cubs, and third *conceived* what it meant to intrude upon a protective mother bear with cubs. After these cognitive activities came the biochemical and neurological changes in the brain and body that are perceived as emotions.

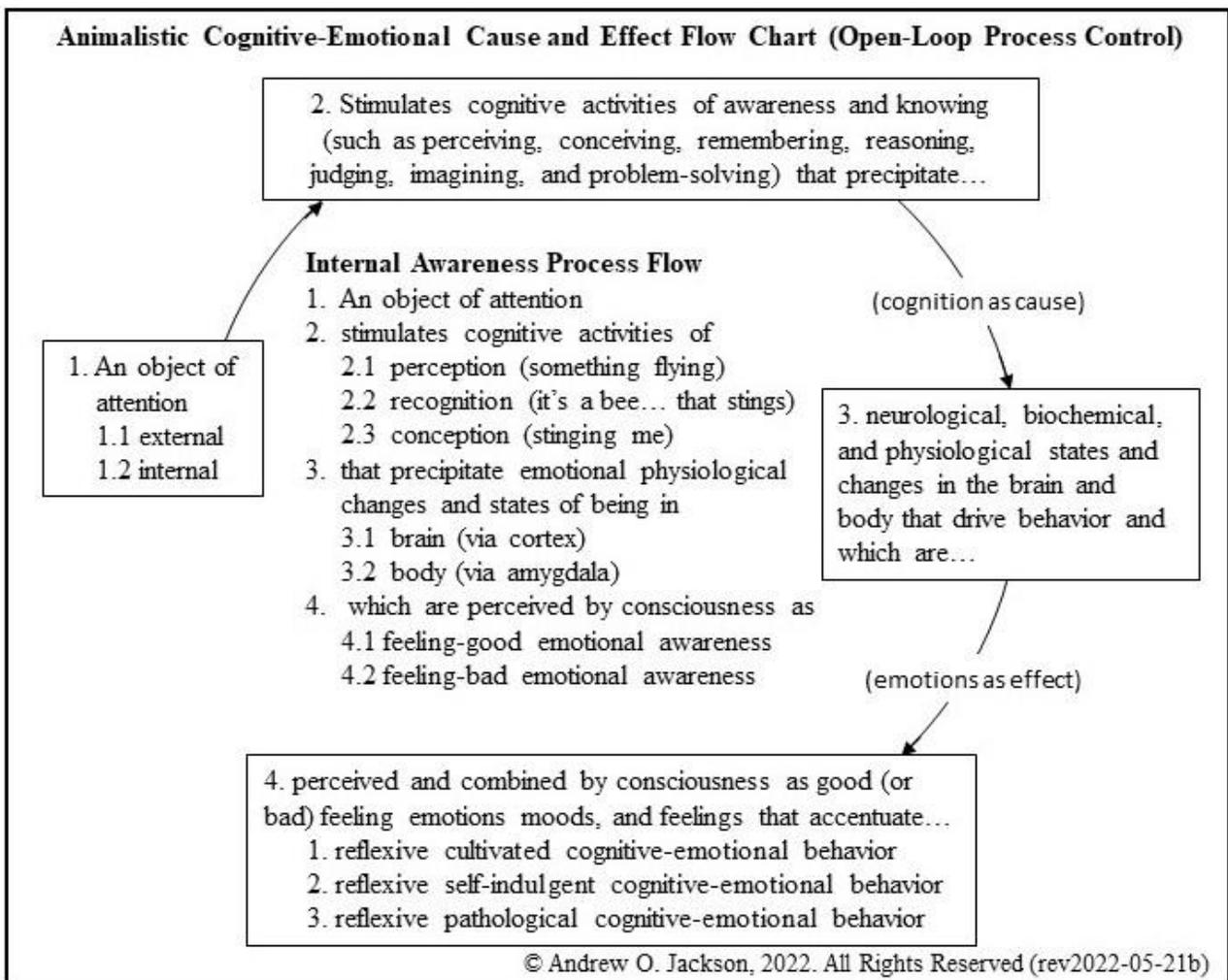


Figure 2: Animalistic Reflexive Cause and Effect Emotional Event

Much of what the character would emotionally feel depends on their past experiences. And,

2.0 Significant Knowing and Awareness: “But it’s a talking dog!”

exactly how the preverbal cognitive pie is divided that initiated this process is not as important as understanding that a “threat” (LeDoux & Pine, 2016; Schaffner, 2020, figure 32.1) is not a threat until cognitively perceived, recognized, and conceived as a threat. Only then do changes and states of emotional physiology in the brain (via cortex) and body (via amygdala) occur (**reference Figure 2**). As to what the changes and states of physiology in the brain and body actually feel like is not only genetic but socially and culturally driven. An excellent source for identifying emotions and their cognitive counterpart is “*The Book of Human Emotions: From Ambigophobia to Umpty – 154 Words from Around the World for How We Feel*” by Tiffany Watt Smith (2015).

What Siddhartha Gautama and ancient Greek philosophers failed to acknowledge in their dissertations of emotions, desire, and intention is that emotional slavery, suffering, and vulnerability (Nussbaum, 2001, 2018) are not a function of emotions, desire, and intent themselves but exist as a function of dwelling upon the lack of that which is wanted, desired, and intended and the evolved and correlating emotional negative feelings. This disregard for a cognitive-emotional control mechanism that guides cognitive behavior towards the emotional positive good feelings when dwelling upon the real or imaginary manifestation of that which is wanted and desired existed then as well as now. The path from the tragedies of ill-fated luck towards health, well-being, and success exists within the cognitive-emotional reality and imagination of positive, good-feeling emotions, moods, and feelings. Humanity has evolved with a guiding control mechanism to keep us on that path.

When defining the functional reality of evolved cognitive-emotional dynamic control, can neuroscience, biochemistry, pharmacology, psychiatry, psychology, therapeutics,

2.0 Significant Knowing and Awareness: “But it’s a talking dog!”

literature, law, philosophy, sociology, with pre-school, primary, and secondary school education agree on.... something? While the linguistics of literature has combined emotional feeling with physiological changes and outward behavior expression, and Joseph LeDoux and associates have separated emotional feeling from physiological changes and outward behavior expression, my work focuses on emotional feeling and accentuating physiological changes but separate from outward behavior expression. Once cognitive-emotional re-processing control theory is understood and awareness of cultivated, self-absorbed, and pathological dimensions are recognized, another discussion may be pursued involving cognitive-emotional dynamics with outward physical expression and behavior.

The common denominator between pre-school, primary, and secondary education and the text “*The Levels of Analysis in Psychopathology: Cross-Disciplinary Perspectives*” (K.S. Kendler, J. Parnas, P. Zachar editors, 2020) is that emotions either feel good or they don’t. And emotionally feeling good, or not, has extreme evolutionary significance within a conscious cognitive-emotional control mechanism evolved correlation with an individual’s health, well-being and success. My definitions and conceptualizations may not be philosophically or scientifically exactly precise, but like calculus using rectangles to calculate the area under a curve, they will convey a useful and functional understanding of an individual’s cognitive-emotional dynamic experience and, hopefully, will move the science and research of human cognition and emotions forward in a practical matter. This paper will focus on the individual, their education, training, and understanding to consciously manipulate, manage, and control their cognitive-emotional experience as an evolved

correlation to their health, well-being, and success in life, and a teacher’s need to integrate this understanding into an overall school curriculum, even at the pre-school level.

3.0 The Linguistic Semantics of Emotions

Have a person’s core beliefs of emotions – which may have been neurolinguistically molded from childhood (Kemmerer, 2015) through family interactions and, in later years, through reading literary works such as Dickens’s *Great Expectations*, Poe’s *The Raven*, and Austen’s *Pride and Prejudice* – impacted their current understanding of emotions and cognition (Tomasello, 2005)? A shared cultural and linguistic development (Bavin, 2012; Allen, 2019) of core beliefs and conceptual understandings about emotions is required for young students to comprehend and follow the emotional twists and turns within these popular English literary works. As students mature and are introduced to the more advanced works of William Shakespeare and others, comprehension is even more dependent upon the prior assimilation of cultural and linguistic paradigms (Evans, 2017; Kenrick et al., 2015). Conceptions of emotions are further reinforced by the logic and reason applied in today’s scientific literature, research, and discussions about emotions (Ekman & Davidson, 1994).

Emotions are felt. Emotions feel good or not. Joy feels good. Anger does not. Love feels good. Hate does not. Emotions are the perception of physiological changes and states within the brain and body we feel (James, 1890; Prinz, 2004). We feel anger; we feel love; we feel joy... all of which have some corresponding neurological, biochemical, and physiological state of being. Although LeDoux distinguishes consciousness perception within the brain (cortex) from physiological changes of the body precipitated by the

3.0 Linguistic Semantics of Emotions

amygdala (LeDoux & Brown, 2017; LeDoux & Pine, 2016; LeDoux, 2020), the natural additional perception of neurological and biochemical changes and states within the body's physiology add color and distinction to the emotional experience and can bring unrealized and subliminal cognitive activity to conscious attention.

Within the emotional linguistics of the "*Iliad*", like Achilles, we are driven by our emotions. But within this linguistics entails a logic that would conclude that emotions precipitate the physiology that drives behavior and is then perceived as emotions. That is, emotion is causal to the physiology we perceive as emotion. But can emotions be both causal to a physiological state and being and simultaneously be the effect of that same physiology? Is that reasonable? Is the emotional psychology of Homer, literature, and modern science erroneous? There is no emotion vs. reason debate because emotions are a function of cognitive behavior precipitating a neurological and biochemical physiology. That is, emotions are the perception of neurological and biochemical physiology precipitated by the individual's cognitive activities of reason and logic (as well as by other cognitive activities of awareness and knowing that include perceiving, conceiving, remembering, reasoning, judging, imagining, and problem-solving (APA, 2020).

When the neurolinguistic cognitive construct of emotions (Friederici, 2012; Ingram, 2007) used in religion and literature (and adopted by philosophy, law, and science) was created and included both (1) the causal cognitive activities of emotion that change the brain and body's neurology and neurological and biochemical physiology (Maletic & Raison, 2017), (2) the perceived effect of these same biological changes (Davidson & Begley, 2012; Smith, 2015; Pessoa, 2013), and (3) emotions outward expression in physical behavior

3.0 Linguistic Semantics of Emotions

(Homer, 800-700/2009), humankind usurped emotions' evolutionary function. Instead of allowing emotions to perform their natural evolutionary and symbiotic function of providing necessary regulatory feedback and control on cognitive activities, emotions became aberrant, destructive, and untrustworthy because they were (falsely) deemed to cause the biological changes that drive a person's thoughts and behaviors (Goleman, 2003; Gorwood et al., 2008; Gross, 2014). As such, emotions must be (erroneously) regulated, controlled, and managed, with pharmaceuticals if needed, which only further disinherits their evolutionary function of guiding one's cognitive behavior to improve one's health, well-being, and successful decision making.

4.0 Synopsis

- 1) The emotional experience in literature, philosophy, religion, and law for thousands of years, have been a combination of (1) causal neurological and biological changes in the brain and body that drive a person's behavior and (2) the perceived effect of the same changes of the brain and body that a person feels and perceives. The mind has neurolinguistically created a cognitive construct that defines emotions as (1) causal to neurological and biological change within the brain and body, (2) the perceived effect of this same neurological and biological change combined with (3) any associated behavior expression. This confusion may be acceptable in literature and religion. But it is not appropriate linguistics for philosophy, law, evolutionary physiology, and the psychological and medical sciences, which must now reconstruct, utilize, and educate from a more functional definition.
- 2) Emotions-as-effect theory uses the principles of evolution to understand and define the emotional experience as the good- or bad-feeling perception of neurological,

4.0 Synopsis

- biochemical, and physiological states and changes within (1) the brain (via active cortex) and (2) the body (via active amygdala) precipitated by cognitive activities (LeDoux, 2020; LeDoux & Brown, 2017; LeDoux & Pine, 2016).
- 3) Evidence-based therapeutic practices such as rational emotive behavior therapy (REBT) (Ellis & Ellis, 2019), cognitive behavior therapy (CBT) (Beck, 2011), method of levels therapy (MOL) (Mansell et al., 2013), mindfulness (Farb et al., 2014), mindfulness-based cognitive therapy for depression (Segal et al., 2018), eye movement desensitization and reprocessing (EMDR) (Shapiro, 2018), forgiveness therapy (Enright, & Fitzgibbons, 2015), positive psychology (Lopez & Snyder, 2009), emotional intelligence (EI) (Salovey et al., 2004), and interpersonal psychotherapy (Stulberg et al., 2018) all center around an individual's motivation, ability, and skill to re-process cognitive activities (Gross, 2014; Young et al., 2014). These cognitive activities are ultimately evaluated by the existence of good- or bad-feeling emotions. This is the use of cognitive-emotional re-processing closed-loop control theory.
- 4) The roots of bipolar disorder (Miklowitz, 2014), schizophrenic tendencies, and other psychotic disorders (Terrier & Taylor, 2014) may be dissociation from the evolutionary emotional regulatory feeling-good (uplifting) and feeling-bad (depressing) sides of the three-sided coin that modulate cognitive activities. Although this is only hypothetical and needs research, the concept becomes viable only when emotions' evolutionary role in regulating rather than being regulated is understood and accepted.
- 5) Recognizing emotions-as-effect and cognitive-emotional re-processing closed-loop control theory within modern evidence-based therapeutic practices will improve the

4.0 Synopsis

efficacy of such methods because emotions can be re-entrusted with their evolutionary role to guide cognitive behavior.

- 6) Evolution has orchestrated and biologically speaking, a morality in which what “feels-good is good” and what “feels-bad is bad” (Moore, 2019; Nussbaum, 2018). Humanity must nurture new algorithms that transform emotionally negative cognitive activities into emotionally positive ones that reflect healthy neurological and biochemical physiology and compassion and respect for oneself and others.

5.0 Definition Notes

- 1) “Physiology” is the study of functions and mechanisms in a living system (Wikipedia, 2021). The term “neurological and biochemical physiology” is used to accentuate the change and states of neurological and biochemical physiology by consciousness and psychiatric therapeutics.
- 2) “Cognition” is the processes of knowing and awareness, such as perceiving, conceiving, remembering, reasoning, judging, imagining, and problem-solving (APA, 2020), where understanding and comprehension (of thoughts, ideas, and beliefs) can project future consequences and events.
- 3) A person feels/senses/perceives physiological states and changes precipitated by cognitive activities as “emotions,” “moods,” and “feelings” (EMFs). All EMFs have a common characteristic of feeling-good or feeling-bad, but they vary in their level of awareness of associative cognitive (Smith, 2016) and physical behaviors, states, and changes.

5.0 Definition Notes

- 4) “Emotions” as defined here are the good (or bad) combined conscious perception and feeling of neurological, biochemical, and physiological states and changes within the (1) brain (via an active cortex) and (2) body (via an active amygdala) precipitated by cognitive activities of awareness and knowing and where good feeling emotional being has an evolved correlation with health, well-being, and success and long term negative emotional being with its negation. (Notes: (1) short-term negative emotional being is essential for survival. (2) Joseph LeDoux and associates have separated emotional feelings from physiological changes and outward behavior expression (LeDoux, 2020; LeDoux & Brown, 2017; LeDoux & Pine, 2016).
- 5) “Emotional valance” is not used here because in the definition “the value associated with a stimulus as expressed on a continuum from pleasant to unpleasant or from attractive to aversive” (APA, 2020), the notion of “stimulus” lacks clarity and typically refers to an external event, object, situation, or environmental factor/event and not to the good and bad feelings of cognitive-emotional activities within the individual’s mind.
- 6) The “somatosensory system” is “the parts of the nervous system that serve perception of touch, vibration, pain, and temperature” (APA, 2020); by definition, this does not incorporate the perception of emotional feelings derived from the brain and body.
- 7) The relationships between emotions and emotional valance, arousal, and behavior cannot be discussed or understood until a scientific understanding of emotions as an effect of neurological and biological changes in the brain and body precipitated by causal cognitive activities is achieved.

5.0 Definition Notes

- 8) The idea of “neurolinguistic cognitive construct” suggests that a word and its defining cognitive construct (emotions being linguistically combined as (1) a cause of biological change, (2) an effect of the same biological change, and (3) observable physical behavior) have been so woven into the fabric of the mind that this cognitive construct is a physical, neurological aspect of the brain (APA, 2020; Costandi, 2016; Ingram, 2007).
- 9) James Gross’s process model of emotional regulation defines five steps towards emotional generation, where each step is a “potential target for regulation”: situation selection, situation modification, attentional deployment, cognitive change, and response modification (Gross, 2014). The emotions-as-effect theory uses these steps as potential targets for “re-processing” cognitive activities to regenerate new physiological conditions and states perceived as new emotions.
- 10) “Emotional control” entails opposite cause-and-effect conceptualizations. Emotional control, as commonly used in literature, religion, science, law, and philosophy, means managing, restricting, and regulating emotions (Gross, 2014) because emotions *are causal* to neurological, biochemical, and physiological changes within the brain and body that drive behavior. In engineering control theory (Marken 2020; Ogata, 2010; Palm, 2014), emotional control means emotions are regulated and managed as an end product of a system. Other “manipulated variables” are changed and altered within that system, resulting in a controlled variable (emotions) change. That is, emotions are first a result of, a consequence of, or **an effect** of a system (Powers, 2016). Only then, if and

5.0 Definition Notes

when used as feedback to the system (and reconstruct, re-organize re-process cognitive beliefs) do emotions become “controlled.” (See the following discussion on closed- and open-loop feedback process control networks).

- 11) Cognitive-emotional development within an individual involves learning, practicing, and utilizing various cognitive-emotional re-processing techniques where positive feeling emotions, moods, and feelings accentuate compassionate behavior. To develop an individual’s skills, abilities, and beliefs to re-process cognitive behavior, cognitive-emotional health education is necessary within our primary and secondary education and should be an integral part of cognitive behavior therapies.
- 12) A cognitive-emotional dynamic re-processing therapy would utilize the perception of emotional negative being (emotionally feeling bad) to aid re-processing cognitive activities of awareness and knowing such that the precipitating neurological, biochemical, and physiological states and being of the brain and body perceptually feel emotionally good.

6.0 Cognitive vs. Emotional Control:

Linguistic Semantics vs. Process Schematics

A thermostat in a room controls the room’s temperature (temperature control). Yet what is being managed are various internal variables within the furnace/air conditioning units. The room temperature is the controlled variable, and the heat and cool outputs are the manipulated variables (Marken 2020; Ogata, 2010; Palm, 2014). If more heat is needed in the winter, the furnace is activated, and if more cooling is required for the summer, the air

6.0 Cognitive vs. Emotional Control: Linguistic Semantics vs. Process Schematics

conditioner is activated. Cruise control on a car controls the car's speed (speed control), but what is being managed is a variety of internal variables within the engine and transmission. The car's speed is the controlled variable, and the power output is the manipulated variable; for the car to maintain the desired speed going up a hill, more power is needed, and going down, less. Within the furnace, air conditioner, and car, multiple internal functions are being "manipulated" to control temperature and to control speed. Only by understanding the process schematics within each system does the cause-and-effect terminology of temperature control and speed control lead a person to comprehend what (and how) each process within a system can be manipulated to maintain the desired outcome (goal).

These control systems are *closed-loop* process control systems because they depend on feedback information (room temperature, car's speed) to manipulate the behavior of each system's internal processes to achieve the desired result (goal). The term "closed-loop control" means there is a feedback loop. An *open-loop* process control system (like a gas burner on a stovetop) does not have a feedback loop to regulate the gas flow to the flame, say to turn down the flame under a pan when frying eggs are starting to burn. The temperature in the oven can be set to the desired goal, the system will adjust the heat output to maintain that fixed temperature in a closed-loop control system (Marken 2020; Ogata, 2010; Palm, 2014).

 6.0 Cognitive vs. Emotional Control: Linguistic Semantics vs. Process Schematics

This text is about individual self-empowerment, where consciousness perceives, comprehends, and manipulates one's cognitive processes towards self-determined and desirable goals and outcomes. Where one's emotional feelings may be an un-measurable quantity in research psychology, internally to the individual, they are readily perceptible. The psychological terminology of "emotional control" in control systems engineering is correct but linguistically confusing. Emotional control is the self-perception, -measure, -evaluation, and use of emotions to control, manipulate, and re-process cognitive activities within a "closed-loop" process control system (**reference Figure 3**). Cognitive-emotional

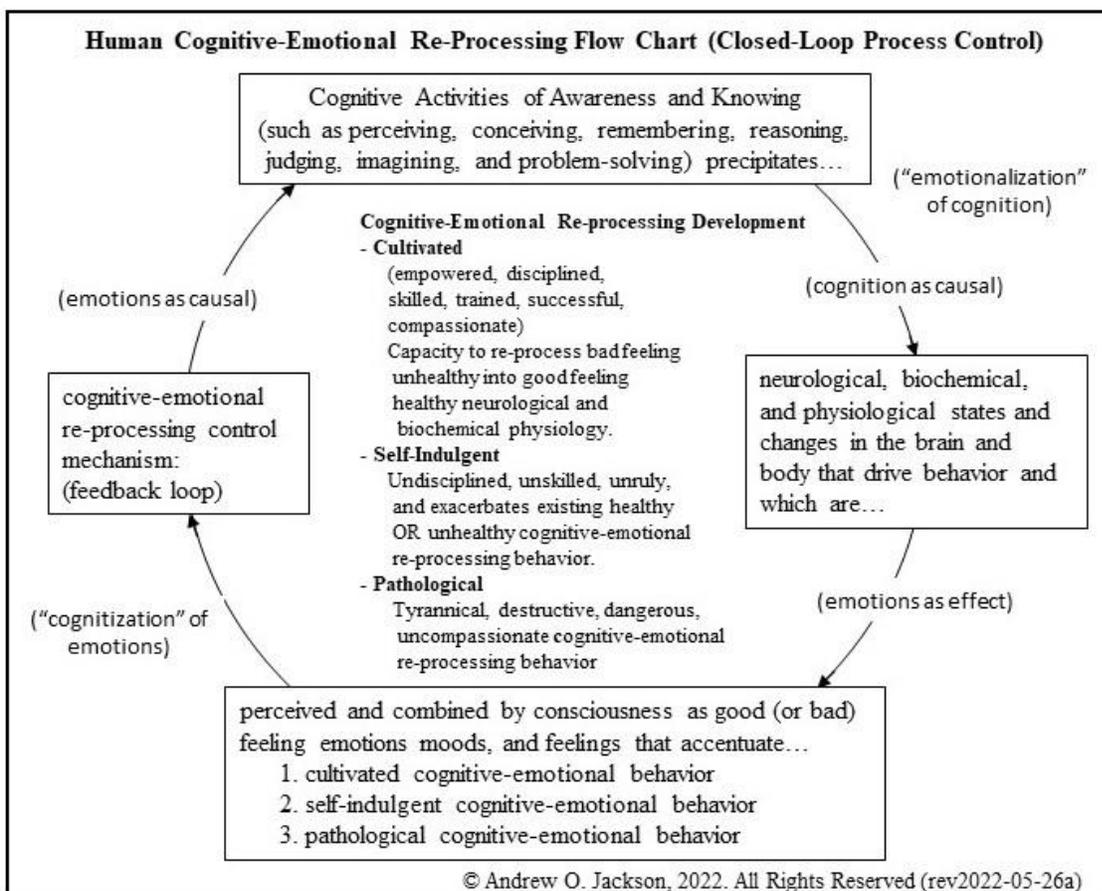


Figure 3: Human (vs. Animalistic) Closed-Loop Cognitive-Emotional Re-Processing

6.0 Cognitive vs. Emotional Control: Linguistic Semantics vs. Process Schematics

development is where discipline, training, and skill promote healthy, successful, and compassionate good feeling states of being.

Open-loop emotional control is more indicative of current literature, psychology, medicine, law, and philosophy where emotions are not used within a feedback loop to stabilize the system (**reference figure 4**). Problems within an individual’s health, well-being, and success become more viable when emotions are not used as feedback to control, manipulate, and re-process cognitive behavior. The open-loop process control’s resulting neurological and biochemical physiology is more susceptible to external environmental disturbances disempowering the individual.

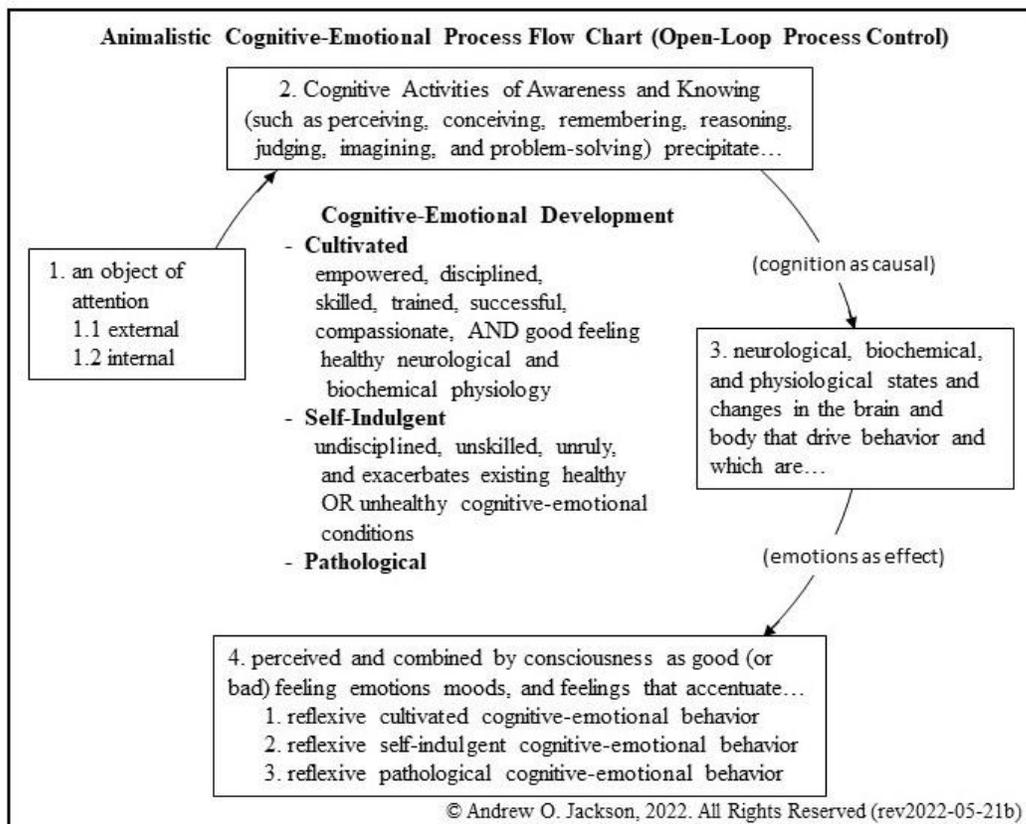


Figure 4: Animalistic Cognitive-Emotional Processing Flow Chart (Open-Loop)

 6.0 Cognitive vs. Emotional Control: Linguistic Semantics vs. Process Schematics

Only by understanding the process schematics within an individual's cognitive, neurological and biochemical, and physiological states and changes, and resultant emotional behavior does the cause-and-effect terminology within cognitive-emotional behavior control leads an individual to comprehend what cognitive activities within themselves can and should be self-manipulated and re-processed to maintain one's own desired emotional state. Every psychological therapy provides its unique construct of cognitive behavior and its system for cognitive manipulation, re-processing, and change to reach a desired emotional goal. Each provides its methodology for emotional regulation and control – as in engineering control theory – that may be used by the individual.

*Measure the effect, control the cause. Emotions are the effect,
cognitive activities are the cause.*

7.0 Historical Background:

Emotions as a Cause of Physiological Change

Professor Antonio Damasio outlines the modern psychological theory of emotions at the beginning of his book *The Feeling of What Happens: Body and Emotion in the Making of Consciousness* (Damasio, 1999). Paraphrased, he describes that (1st) “emotions [are] induced in the brain,” which leads to (2nd) “consequent bodily changes” and to a (3rd) “feeling [that] could become *known* to the organism having the emotion.” He defines emotions as causes of

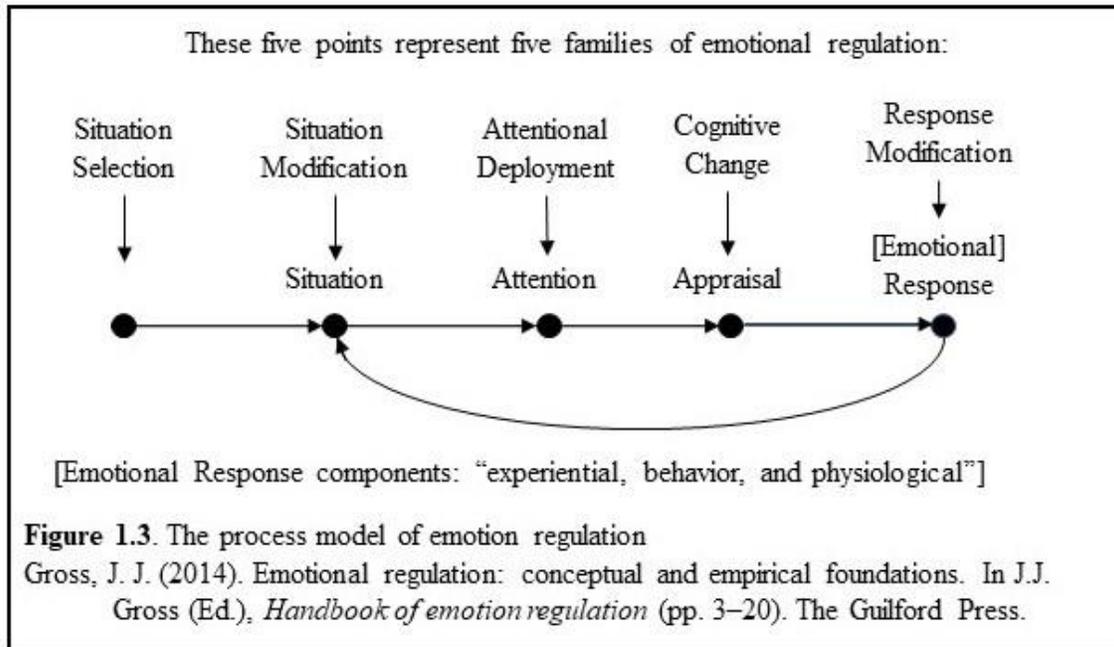


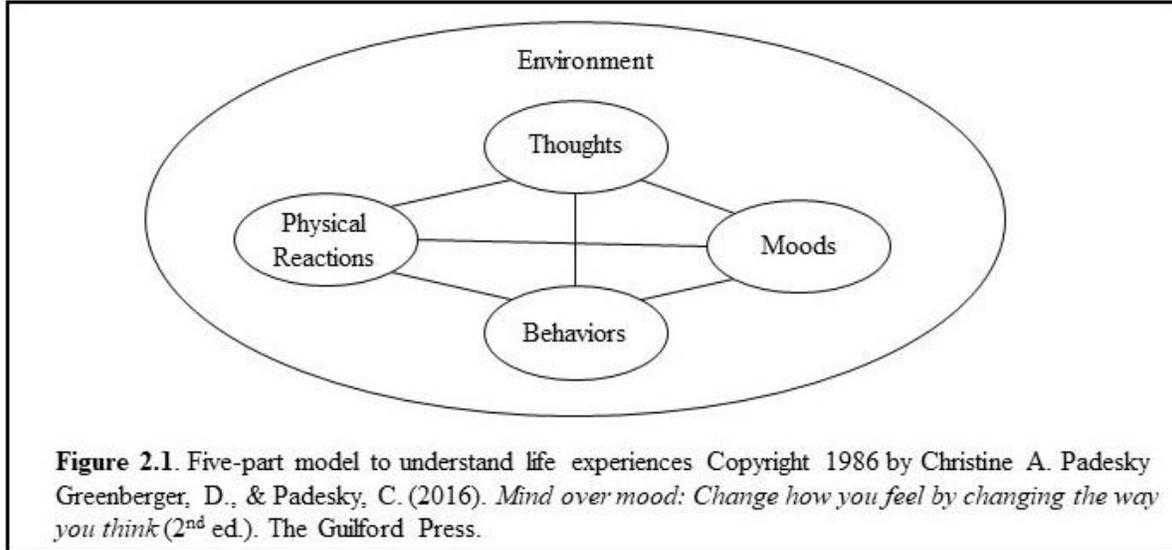
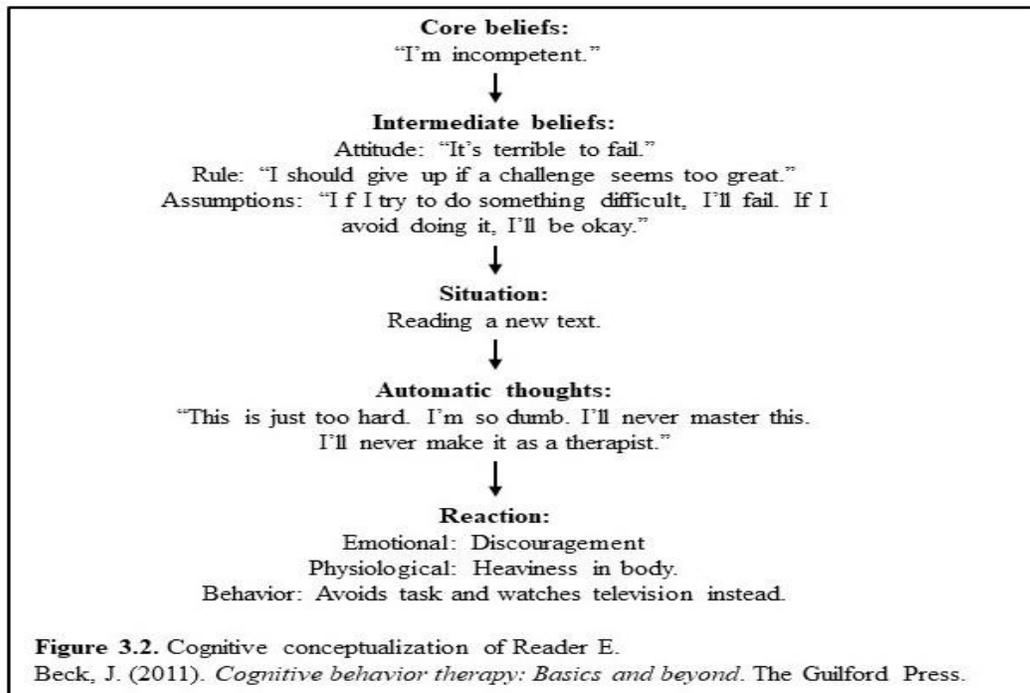
Figure 5: Gross: A process model of emotion regulation.

the physiological changes that a person then feels as emotions; emotions are both a cause and an effect of such changes.

James Gross illustrates in his modal model of emotional generation (**reference Figure 5**) that emotions are a “response” to the cognitive activities of paying attention to and making an appraisal of a situation, “e.g., a snake slithering into my tent.” To paraphrase Gross, when such moments lead to emotions that are of the wrong type, intensity, or duration for a given situation, we may try to regulate our emotions: “This fundamental insight that emotions can and should be regulated in certain situations is well represented over the centuries” (Gross, 2014).

The idea of “response” is further broken down into its own “experiential, behavioral, and neurobiological response systems” without a clear cause/effect relationship between these systems. However, the linguistics of the very title of his article, “Emotional Regulation:

7.0 Historical Background: Emotions as Cause of Physiological Change

**Figure 6:** Padesky: Five-part model.**Figure 7:** Beck: Cognition to reaction.

7.0 Historical Background: Emotions as Cause of Physiological Change

Conceptual and Empirical Foundations” suggests that emotions need to be regulated because extreme negative emotions are traditionally perceived as aberrant, dangerous, out-of-control, and causal to aggressive and destructive behavior (Emotion, 2020).

The same lack of clarity arises within the all-encompassing cause/effect order within the “environment” of “thoughts, physical reactions, moods, and behaviors,” as written in *Mind over Mood* (Greenberger & Padesky, 2016) (reference Figure 6). This lack of a distinct cause/effect order comes in part from the commonly accepted cause/effect relationship as illustrated in *Cognitive Behavior Therapy: Basics and Beyond* (Beck, 2011), where again, emotional, physiological, and behavioral “reactions” are bundled into an unidentified cause and effect process (reference Figure 7).

If the circular logic of the standard ABC thought/emotion diagram, as illustrated in *Mindfulness-Based Cognitive Therapy for Depression* (Segal et al., 2018), (reference Figure

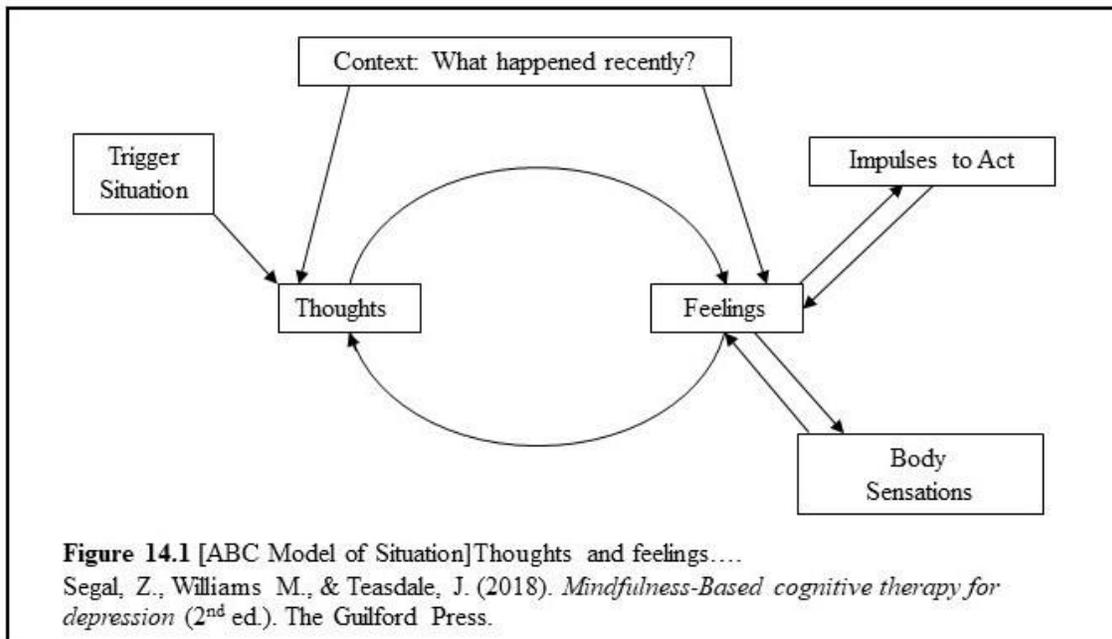


Figure 8: Segal: ABC model of the circular thought–emotion effect

7.0 Historical Background: Emotions as Cause of Physiological Change

8) was to include the physiological states and changes associated with emotions, the causal nature of “thoughts” on physiology would clarify emotions as a perceived effect of these states of being.

These diagrams exemplify the confusion and lack of cause-and-effect analysis between cognition and the conscious perception of emotions. Emotions are typically characterized as causal to the physiological changes that drive behavior (Emotion, 2020) and the basis of emotional dysfunction, disorder, and illness. Otherwise, why would emotions need to be regulated, managed, and controlled (even with the use of pharmaceuticals)? By integrating modern observations of the neurological network centers of the brain and physiological changes of the brain and body, the flow in the cause-and-effect process become discernable.

8.0 The Cognitive-Emotional Re-Processing Flow Chart

Cognition addresses the processes and activities of knowing and awareness, such as perceiving, conceiving, remembering, reasoning, judging, imagining, and problem-solving (APA, 2020), where understanding and comprehension (of thoughts, ideas, and beliefs can project future consequences and events. We perceive touch, taste, sight, hearing, and smell with our senses. Each of these activities has its system of nerves or neurology, i.e., a neuro-network. We also perceive states and changes within the body and brain as emotions, moods, and feelings (**reference Figure 9**):

(1) Within a cognitive-emotional event, cognitive activities of awareness and knowing stimulate (2) emotional neurology. This neurology is not the emotions a

9.0 The Cognitive-Emotional Re-Processing Flow Chart

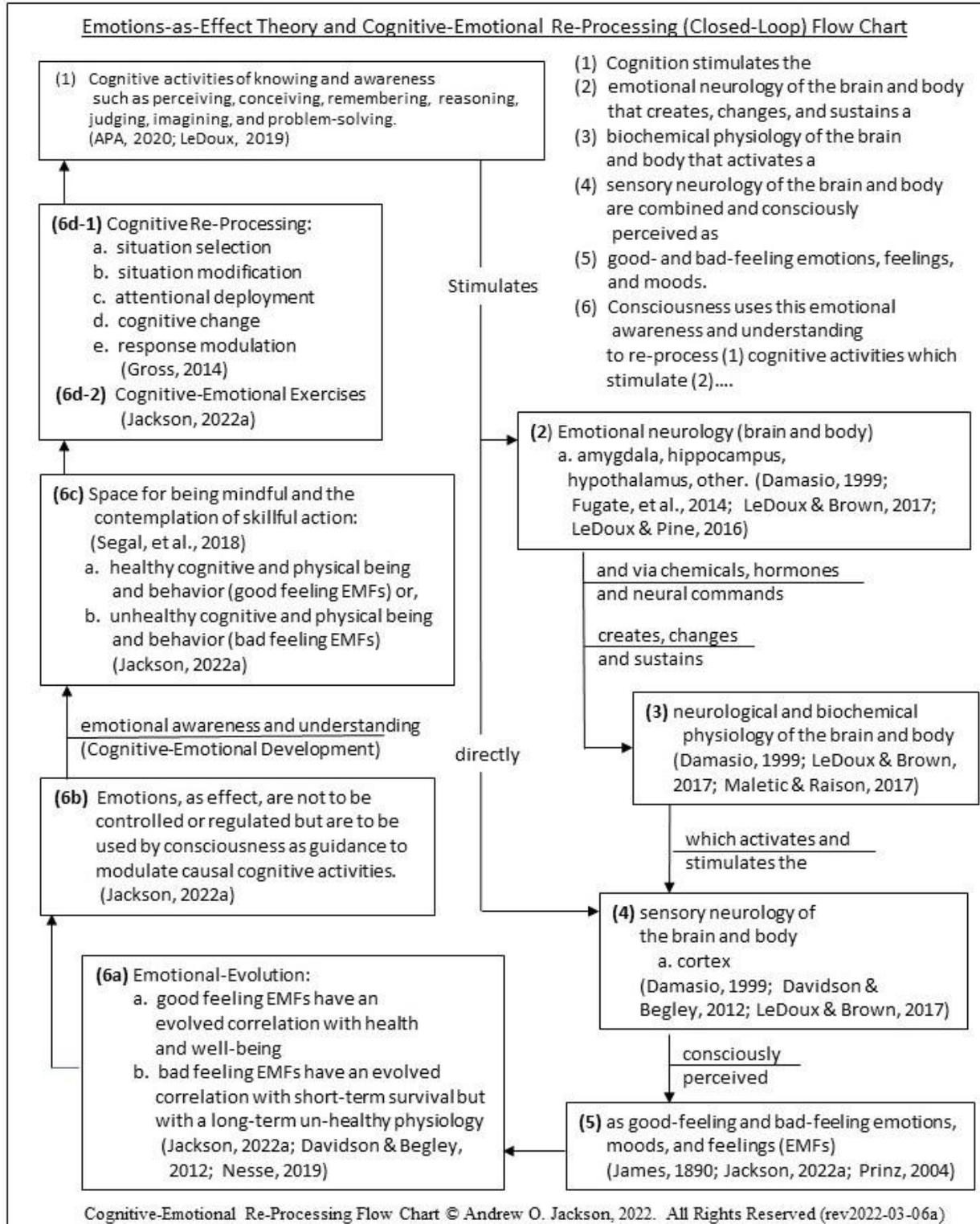


Figure 9: Human Cognitive-Emotional Re-Processing Flow Chart (Closed-Loop Process Control)

8.0 The Cognitive-Emotional Re-Processing Flow Chart

(nerves) commands creates, changes, and sustains the (3) neurological and biochemical physiology of the brain and body. This physiology activates (4) sensory neurology of the brain and the body that consciousness (5) perceives as good- and bad-feeling emotions, feelings, and moods. (6) Consciousness uses this emotional awareness and understanding to re-process cognitive activities to a better emotional feeling place (that has an evolved correlation with healthy and robust neurology, biochemistry, and physiology. Note: cognition can simulate the sensory neurology directly ((LeDoux & Brown, 2017; LeDoux & Pine, 2016; LeDoux, 2020).

9.0 Emotions in Science, Literature, and Religion

Emotions are perceived in science (Davidson & Begley, 2012), literature (Homer, 800-700/2009), and religion (Goleman, 2003) as potentially aberrant and destructive and in need of management and control, sometimes with the use of pharmaceuticals, because emotions are understood and defined as causal to neurological and physiological changes that can have a significant effect on driving behavior (Barlow, 2014; Emotion, 2020). The mind neurologically combines (1) the cognitive activities of awareness, (2) changes in the neurology and biology of the body/brain, (3) the feelings and perceptions of these same changes in that neurology and biology, and (4) outward behavior into one cognitive construct called emotion (Tomasello, 2005). This confusion only adds to the color and mystery of scholarly dissertations in religion and literature, but within science, law, and philosophy, this muddle is unacceptable.

9.0 Emotions in Science, Literature, and Religion

Suppose emotions are causal to neurological and physiological changes in the body and brain. Then what term is appropriate to use when discussing the conscious good- and bad-feeling perception of these same neurological and physiological changes that a person consciously feels and perceives? The most commonly used and neurolinguistically programmed term is “emotion”.

But then, what of the perceived causal nature of emotions? Is it reasonable for psychology, as a science, to use the same terminology as both a cause of physiological change and an effect of this same physiological change? This is not science. In other words, emotion cannot be defined as both the cause of neurological and physiological change and simultaneously the perceptual awareness of that same neurological and physiological change.

10.0 Dashboard Analogy

Emotions are similar to the “check engine” light on the dash of a car. The light signifies problems within the mechanical “physiology” of the engine. The light is not the cause of the problem. The light is not aberrant or destructive; it has mechanically “evolved” to bring to conscious awareness potential problems within the engine. If these mechanical problems are left unresolved, they will lead to mechanical breakdown and failure – like what is observed in one’s biology when one feels depression or anxiety, which can lead to suicide.

The “check engine” light on the dash of a car is not causal – it is an effect. The issue is inside the engine; it is not the light itself. The light is the messenger informing the operator the engine may be damaged if remedial action is not taken. The light is not destructive and does not need to be controlled, managed, or regulated. The light provides an invaluable service that can improve the health and well-being of the engine. Ignoring the light or taking

 10.0 Dashboard Analogy

action to change the light itself – that is, attempting to control, manage, or regulate the light – would be detrimental to the engine’s survival.

11.0 Defining Cognition as a Causal

A person driven by anger, jealousy, or greed may be emotionally driven in a movie or book, but in science, these neurologically and physiologically induced states are a product of cognition.

The neurological network that activates neurological and physiological changes within the brain and body (and is emotionally perceived) is referred to as the “emotional brain” or as emotional neurology (LeDoux, 1996). This emotional neurology is not the perception of emotions but the neurological components – such as the cortex, amygdala, hippocampus, and hypothalamus (LeDoux & Pine, 2016) – involved in actuating neurological and physiological changes in the brain and body that are then perceived as emotions. As it is, (1) the cognitive acts of perceiving, conceiving of, and comprehending, for instance, a mutilated person in a car accident, (2) initiate the activity within one’s “emotional” neurology that, (3) precipitates the changes within the brain and body that, (4) are perceived as emotions. Consequently, cognition can be defined as causal and emotions as the perceived effect (**reference Figure 9, page 35**). LeDoux and associates are advancing the concept where a direct stimulus to the cortex can precipitate the conscious perception of emotion without the perception of bodily changes from the amygdala ((LeDoux & Brown, 2017; LeDoux & Pine, 2016; LeDoux, 2020). I would suggest that the natural and common process is that emotional perception includes changes in neurological, biochemical, and

11.0 Defining Cognition as Cause

physiological states and changes of being in both the brain and body combined. Whereas traditional literary and linguistic emotional conceptualization also includes outward physical behavior, expression, and acts.

Emotional definition in contemporary academic psychology is such that emotions are both a cause (otherwise, why the need for emotional control, regulation, and management, even with pharmaceuticals) and an effect of neurological and physiological changes within the brain and body that is perceived. In emotions-as-effect theory, emotions are defined as the good- and bad-feeling perceptual awareness of these same neurological and physiological changes precipitated by cognition.

This is not a 3000-year-old neurolinguistic emotional construct such as that used in religion (Noss & Grangaard, 2008) and literature (e.g., that seen in Homer's *Iliad*) (Homer, 800-700/2009). (Please note that Joseph LeDoux and associates have separated emotional feelings from physiological changes where I have combined them within the emotional experience.) A person driven by anger, jealousy, or greed may be emotionally driven in a movie or book, demonstrating the need for emotional control. But within engineering process control theory, these neurologically and biologically changes and states of being are a product of cognitive activities which must be managed and controlled. The significance of teaching the science of emotions (separate from their literary, religious, and philosophical conceptualization) in our educational institutions cannot be overstated.

For example, it is essential to understand that a person is not emotionally out of control but cognitively out of control. A person is not suffering from depression because of an emotional disorder and in need of emotional regulation but instead is suffering because of

11.0 Defining Cognition as Cause

science's linguistic confusion regarding how emotions have evolved to guide cognitive activities. Such people have a cognitive disorder and need cognitive rehabilitation to develop the necessary abilities and skills to re-process their cognitive activities. (Note: illnesses, diseases, infections, genetic defects, and physical trauma that affect emotional biology are part of another discussion.)

Emotions are the good- and bad-feeling perception of neurological, biochemical, and physiological changes precipitated by cognition. Cognition initiates (or is causal to) the changes in neurological and biochemical physiology that are then perceived as emotions that feel good (or bad). As such, emotions may be used as a natural cognitive-emotional biofeedback control mechanism and may guide the individual away from aberrant and destructive cognitive behavior and towards cognitive activities that promote personal health, well-being, and success. (Reference a later discussion, 13.0: The Evolutionary Significance of Emotionally "Feeling-Good" or "Feeling-Bad.")

Contrary to the linguistics of literature and religion, cognition, not emotion, precipitates the neurological and biochemical physiology of the brain and body that drives behavior.

12.0 Defining Emotion as an Effect (That Accentuates Behavior)

There is the problem with the commonly accepted linguistic construct of emotions being causal to the changes in an individual's neurological and biochemical physiology that drives behavior, that is, emotionally driven behavior. For example, a person cannot have an emotional reaction to a snake unless there are first the cognitive activities of perceiving the snake understanding that it is a snake, and realizing that the snake can be harmful. Only after these cognitive activities actuate the emotional neurology of the amygdala, hippocampus, hypothalamus, and other portions of the brain can there be physiological changes in the brain

12.0 Defining Emotion as an Effect (That Accentuates Behavior)

and body that are emotionally perceived (Davidson & Begley, 2012; Fox, 2008). Yes, an emotional response occurs (Gross, 2014), but this response is an awareness of cognitive activities' neurological and physiological changes. The emotional response is not causal to the physiological changes that drive behavior. Cognition is causal to the physiological changes that drive behavior.

Although LeDoux and associates distinguish consciousness perception of emotion within the brain (cortex) and physiological changes of the body (precipitated by the amygdala) (LeDoux & Brown, 2017; LeDoux & Pine, 2016; LeDoux, 2020), the natural, additional perception of neurological and biochemical changes and states within the body's physiology add color and distinction to the emotional experience and can bring unrealized and subliminal cognitive activity to conscious attention. Emotional awareness is like a diacritic mark adding emphasis, meaning, and understanding to one's cognitive activities and should (in general terms) accentuate physical behavior only after cognitive re-processing results with a better feeling (and healthy) thought (**reference Figure 9, page 40**).

The snake can also be causal to a reflexive action (Panksepp, 1994). However, even here, that involuntary action cannot occur until first the cognitive perception – or cognitive imagination – of the snake. Cognitive-emotional development and cultivation within an individual is a process of learning, practicing, and utilizing various cognitive-emotional re-processing techniques to where positive feeling emotions, moods, and feelings accentuate physical behavior (**see Section 20, Cognitive-Emotional Re-Processing Gymnasium**). Lack of cognitive-emotional development is where emotions, moods, and feelings (and behavior) result from a circular, self-indulgent cognitive-emotional process lacking any (or

12.0 Defining Emotions as an Effect (That Accentuates Behavior)

minimal) conscious re-processing capabilities. Although in sports, dance, music, and other highly trained physical behaviors (including military combat) where a feeling good, highly nurtured, developed and trained cognitive-emotional reflexive behavior is essential, re-processing skills are still desirable for compassionate and healthy (feeling good) behavior. Upon military personnel decommissioning, redevelopment of an individual's evolved and natural re-processing and reflexive capacities for civilian life is essential (Jackson, 2022).

Author's Note: Maybe academia can develop better terminology to distinguish between compassionate behavior with the ability to re-process their cognitive activities until their resultant emotions, moods, and feelings feel good (which correlates with healthy neurological and biochemical physiology) and uncompassionate behavior within an individual without the necessary skills, training, and ability to re-process their cognitive activities to a better feeling place. This latter, undisciplined, "reflexive" behavior exhibits the commonly accepted traits of "emotions driving behavior" linguistically found in literature and emotional dysfunction and regulation psychology. I have labeled such uncompassionate and undisciplined behavior as "self-indulgent". However, great care and understanding must be taken for those individuals who have not had the social environment to nurture cognitive-emotional re-processing or those who may have some physiological dysfunction or abnormality. The specific concerns will come to light when compassionate and healthy cognitive-emotional re-processing skills, training, and abilities are established as an integral part of our primary and secondary health education (Jackson, 2022).

Can science retain the definition of emotions as the perceived effect of neurological and physiological changes in the brain and body that one's consciousness feels or perceives

12.0 Defining Emotion as an Effect (That Accentuates Behavior)

and avoid defining emotions as causal to these same changes in neurology and biology? This runs counter to thousands of years of neurolinguistic programming that says that emotions are causal to neurological and physiological changes that drive behavior (Homer, 800-700/2009). Scientific, emotional terminology (Ekman & Davidson, 1994) cannot be used as both the cause of neurological and physiological changes and the perceived result (i.e., the effect) of these same neurological and physiological changes. What terminology can reasonably be used if emotions are not defined as causal?

13.0 The Illusion and Reality of Emotions as Aberrant and Destructive

Neurological and physiological changes in the brain and body that are felt emotionally cannot occur until the cognitive, neurological processes of the brain are actualized. That is, there cannot be an emotional reaction to a person being mutilated in a car accident until the event is – consciously or unconsciously – cognitively perceived, conceived, and understood. The cultural cognitive processing of an event activates an “emotional” neurological network that precipitates any number of different cultural combinations of neurological and physiological changes that may then – depending upon one’s emotional acuity – be perceived by consciousness as a (cultural) variety of good- and bad-feeling emotions. As such, emotions are the perception of neurological and physiological changes (effect) precipitated by cognition (cause) (**reference Figure 2, page 21 & Figure 7, page 40**). A culturally typical emotional reaction to a person being mutilated in a car accident cannot occur unless the event's cognitive perception, conception, and comprehension are first actualized.

13.0 The Illusion of Emotions as Aberrant and Destructive

The (causal) cognitive awareness and processing of an event (either consciously or unconsciously) must precede the emotional effect of that awareness and processing.

Unfortunately, because of a neuroplastic brain, the historic linguistic construct of emotions has been neurolinguistically programmed to include (a) the cognitive activities associated with physiological changes, (b) these same physiological changes that drive behavior, and (c) the emotional perception of these same physiological changes, emotions can be deemed aberrant and destructive.

Because cognition is causal the emotional neurology that precipitates physiological states and changes one's consciousness perceives and conceives of as emotion, cognition can be aberrant and destructive and not emotion because emotions are an effect. Cognition is the cause. Emotions, defined, measured, and perceived at this point in time – not from the combined perspectives within the literary and religious paradigms learned from birth – are not destructive or aberrant because emotions are not causal to the neurological and biochemical physiology changes within the brain and body. *Emotions become causal when perceived by consciousness* and, depending on the cultural nurturing environment, even drive cognitive activities (and resulting neurological and biochemical physiology and behavior) uncontrollably. But emotions, when defined, measured, and perceived from this perspective, are a *cognitive activity* and, as such, can be so overpowering to spin cognition and the resulting neurological and biochemical physiology dangerously and aberrantly out of control **(reference Section 5.0)**

Emotions, depending on when and where they are defined, measured, and perceived (as an effect of causal cognitive activity or as casual when cognitively perceived and driving

13.0 The Illusion and Reality of Emotions as Aberrant and Destructive

awareness and knowing) may or may not be aberrant and destructive. When cognitive activity is dangerous and aberrant, emotions are a reflection of that activity. Most importantly, emotions as a biofeedback control mechanism can be used to understand, guide, reframe, and refine harmful, fragile, and vulnerable cognitive activity (Nussbaum, 2001) into positive, robust, healthy, and invulnerable cognitive activity (Jackson, 2022). The vast array and classification of emotional disorders, including somatic disorders, dissociative disorders, and borderline personality disorder, which can also be conceptualized as disorders of extreme emotional dysregulation (Payne et al., 2014), act only to further repudiate emotions' evolutionary role in regulating cognitive behavior and mislead experimental design.

Cognitive therapy for depression that concentrates on identifying and modifying maladaptive “core schemas” is a Socratic style of questioning (Young et al., 2014) overshadows a very simple, self-directed, self-aware style in which the very existence of positive or negative emotions, feelings, or moods themselves directly signals the presence of maladaptive thoughts and behaviors. The issue is not to “make progress on short-term goals regardless of how the client is feeling” (Young et al., 2014) but rather to re-process cognitive activities, transforming them into better-feeling thoughts and potential behaviors (before taking any action). The roots of depression, suicidal depression, mania, bipolar disorder (Miklowitz, 2014), schizophrenia tendencies, and other psychotic disorders (Terrier & Taylor, 2014) may be a complete dissociation from the evolutionary emotional regulatory and control centers of the brain that modulate cognitive activities. Although this is only hypothetical and needs research, the concept becomes viable only when emotions' evolutionary role in regulating rather than being regulated is understood and accepted.

 14.0 The Evolutionary Significance of Emotionally “Feeling Good” or “Feeling Bad”

14.0 The Evolutionary Significance of Emotionally “Feeling Good” or “Feeling Bad”

Is it possible to think of emotions as developing separately from the evolutionary process of the human species? If emotions have been run through the evolutionary mill, i.e., are not part of the evolutionary process, what are some characteristics of the resultant design? Is it possible to use the ideas and concepts found within evolution to form logical inferences and conclusions about emotions and feelings pertaining to physiological functions? (Brune, 2016; Nesse, 2019; Shackelford & Zeigler-Hill, 2017)

Emotions are felt. Emotions feel good or not. Joy feels good. Anger does not. Love feels good. Hate does not. Emotions are the perception of physiological changes and states within the brain and body we feel (James, 1890; Prinz, 2004). We feel anger; we feel love; we feel joy... all of which have some corresponding neurological, biochemical, and physiological state of being. Although LeDoux and associates distinguish consciousness emotion perception within the brain (cortex) and physiological changes of the body (precipitated by the amygdala) (LeDoux & Brown, 2017; LeDoux & Pine, 2016; LeDoux, 2020), the natural, additional perception of neurological and biochemical changes and states within the body’s physiology add color and distinction to the emotional experience and can bring unrealized and subliminal cognitive activity to conscious attention.

The term “emotion” is a misleading neurolinguistic cognitive construct of a civilized, literary, and religious society (Bavin, 2012; Noss & Grangaard, 2008) that has caused us to ignore the dynamic relationship between cognition and emotion within the context of emotions evolutionary controlling function to modulate cognitive re-processing activities (Gross, 2014). Professor Randolph M. Nesse writes in *Good Reasons for Bad Feelings*:

14.0 The Evolutionary Significance of Emotionally “Feeling Good” or “Feeling Bad”

Insights from the Frontier of Evolutionary Psychiatry (Nesse, 2019), “Why did natural selection leave us so vulnerable to so many mental disorders?” The short answer is that evolution did not; society did. Depression, suicidal depression, mania, psychotic mania, schizophrenic tendencies, or other disorders of the mind will exist when emotions, moods, and feelings are ignored, disregarded, suppressed, or even disassociated from (as an evolved bio-feedback control mechanism to reprocess, reorganize, and restructure cognitive behaviors and beliefs towards those that emotionally feel better and signify healthier physiology) (Davidson & Begley, 2012; Nesse, 2019).

The notion that species develop by naturally selecting attributes that are advantageous for survival is the cornerstone of the theory of evolution (Darwin, 1859). The following scenarios are indicative of evolution’s impact on the development of an emotional directive mechanism if any human is to live to maturity, or thrive, and produce offspring to continue the survival of the species: (Note: understanding and appreciating LeDoux and associates division of conscious emotional perception (via cortex activities) and physiological changes (via amygdala activities) (LeDoux & Brown, 2017; LeDoux & Pine, 2016; LeDoux, 2020) will help realize how neurological circuits in the brain can be cross-wired through genetic mutations or environmental influences.)

- (1) If feeling good correlates with having a well-balanced and physiologically vital body, then feeling good while climbing a tree to gather food or balancing on slippery rocks in a rushing stream to fish may not be hazardous. However, if feeling good were to correlate with a weakened and lethargic neurological and biochemical physiology, such challenging actions would tend to be deadly. Such a false positive correlation

 14.0 The Evolutionary Significance of Emotionally “Feeling Good” or “Feeling Bad”

between emotions and vital neurological and biochemical physiology would be disadvantageous to survival.

- (2) How would a genetic line survive if feeling good was correlated with (1) cognitive knowledge of strength, vigor, and adeptness and (2) actual physiology of weakness and ineptitude? Such a correlation permits limited survivability when climbing trees, foraging on the savannah in search of food, or, in a modern example, when an intoxicated person confidently gets behind the wheel of a car to navigate through rush hour traffic. Where is the motivation to act when there is an actuality of vitality, vigor, and strength, but emotionally, there is a feeling of illness, lethargy, and weakness? It is logical to conclude that, evolutionarily speaking, feeling good correlates with vitality, vigor, and strength, and feeling bad correlates with illness, lethargy, and weakness.
- (3) Imagine that basic life behaviors such as breathing or eating were so emotionally painful – or their lack was so pleasurable –to bring about suffocation, starvation, and death. Such an emotional and physiological correlation would lead to the demise of an individual and their genetic line. If this were a genetically predisposed or inherited condition or even a genetically developed predisposition to learn such behavior, such a false positive correlation between emotions and physiology would hinder personal and genetic survival. Therefore, there is a natural correlation between feeling good and exhibiting healthy physiological behavior and functions.

From an evolutionary perspective, feeling good means there is a positive correlation between the neural networks that activate (1) cognitive awareness of one’s strength, vigor,

14.0 The Evolutionary Significance of Emotionally “Feeling Good” or “Feeling Bad”

and well-being, (2) an actualization of physiological strength, vigor, and well-being; and (3) the neural networks associated with the emotions of pleasure. The neurological and biochemical physiology of the individual, at both the molecular level and the neural network level, must sustain the positive correlations between (1) cognitive knowing, (2) actualization, and (3) feeling of having strength, vigor, and well-being, with (4) good feeling emotions. Simply put, if these correlations did not exist in this way, a person would have a low probability of survival. Any attempt to understand and affect the internal human environment must be taken with an understanding of the changing neurological, biochemical, and physiological conditions of that environment as indicated by an evolved emotional neurocircuitry of the human brain and body.

Suppose a person can live (and even flourish) to maturity and has offspring who will continue the species’ “survival”. Might there be an evolved link or correlation among (1) an individual’s emotions, (2) their cognitive activities, and (3) their body’s physiology? The bottom line is that except disease, illness, and infection, the neurological and biochemical physiological signatures of “emotional disorders” (Brune, 2008; Maletic & Raison, 2017) will exist as such when conscious cognitive behavior ignores the governance and control of an essential internal bio-feedback and control mechanism called emotions, moods, and feelings.

Any attempt to understand and affect the internal human environment must be taken with an understanding of the changing neurological, biochemical, and physiological conditions of that environment as indicated by an evolved emotional neurocircuitry of the human body.

15.0 Cognitive-Imagination and Evolution

15.0 Cognitive Imagination and Evolution

How would a genetic line survive (1) if the body's need for water did not stimulate the mind to produce imagery of obtaining water or (2) if this imagery of obtaining water correlated with negative feeling emotions? If the body needs water, this need must correlate with the mental act of imagining water and with the positive emotions associated with finding and drinking water. There is a correlation between imagining the necessities of life and experiencing positive emotions. If instead, there was a correlation such that the imagery of food, water, and shelter brought about negative feeling emotions, then these basics of life would be avoided and lead to an evolutionary dead end. Therefore, for the survival of the species, there must be an evolved correlation between (a) the neural networks of the cognitive brain of imagination and (b) the neural networks of the cognitive-emotional biofeedback control mechanism such that (c) it feels good when (d) the individual's imagination dwells upon the presence of food, water, and shelter, (e) which are wanted and desired by the body to survive.

A person cognitively dwelling upon the presence of that which is wanted triggers a healthy neurological and biochemical physiology within the brain and body that actuates a neural network combination perceived by consciousness as emotionally positive good feelings. When a person dwells upon a lack of that which is wanted, it triggers a short-term survival, but long-term unhealthy and damaging neurological and biochemical physiology within the brain and body that emotionally feels bad.

How would a genetic line survive if the imagination and belief of *not* obtaining food, water, and shelter were correlated with feeling good? Alternatively, how would a person (and

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their genetic line) survive if cognitive imagery dwelt upon that which is not wanted, and this mental activity did not correlate with negative feeling emotions? When a person dwells upon that which is not desired, it triggers a survival neurological and biochemical physiology of the brain and body (but with long-term negative physiological consequences) that is consciously perceived as emotionally negative feelings. There must have been an evolutionary development that resulted in these correlations, or we would not have survived as a species.

16.0 Cognitive Regulation through Emotional Awareness

Cognition is causal (to neurological, biological, and physiological states and changes of being); emotion is a perceived effect (of these neurological, biological, and physiological states and changes); but emotions can become causal when they are used to drive re-processing cognitive activities. Aberrant and destructive cognition, *rather than emotions*, must be managed and controlled because cognitive behavior precipitates neurological and biological changes within the brain and body that drive behavior. Emotions have evolved as a control mechanism to guide cognitive activity to improve health, well-being, and success. Literature and religion may not understand this evolution, but philosophy, law, and science certainly should.

The accentuation of cognitive activities with emotional awareness derived from neurological, biochemical, and physiological changes and states of the body is an integral part of the cognitive-emotional control mechanism to maintain the body's health, strength, and vigor. Emotional awareness brings another attribute to a person's conscious

16.0 Cognitive Regulation through Emotional Awareness

manipulation of their cognitive and physical activities. And the more developed and cultivated one's abilities to distill emotionally negative cognitive behavior into an emotionally positive state of being, the greater health, well-being, and success potential within any decision making.

The ethical debate of a "feels good, is good" morality within, but unrecognized evolved cognitive-emotional control mechanism has continued for thousands of years and may continue for thousands more. Ultimately, however, it is an individual debate that continues throughout a person's lifetime, hopefully, a lifetime of continual growth and greater understanding. The critical analysis and questioning demanded by a cognitive-emotional health education curriculum in our educational institutions can be of a tremendous individual, societal, and cultural benefit to their health, well-being, and success.

17.0 Hot Stove Analogy and Depression's Signature Physiology: Burnt Hand Disease

The physical pain when a hand rests on a hot stove brings about a very natural reflexive response (Panksepp, 1994). The perception of pain begins a series of neurological, biochemical, and physiological activities to remove and protect the hand from the burning stove. The actuation of the body's natural reflexive response is vital to the hand's maintenance, health, and working order. If the pain is ignored and the hand remains on the hot stove, the neurological, biochemical, and physiological state of the hand changes by the degree to which the hand burns. The feeling of pain is crucial to the body's health and survival. Lack of response to physical pain is problematic. Until a reflexive or conscious

17.0 Hot Stove Analogy and Depression's Signature Physiology

reaction exists that removes the “hand on the hot stove,” the hand will not heal and a “burnt hand” biological signature will develop and be maintained.

Evolution has built up a biological sensory and reflexive mechanism that pulls the hand off the stove to prevent harm. Suppose, for some reason, the hand remains on the hot stove long enough to burn. In that case, a biochemical examination of the skin will give a definitive analysis comparable to any other hand that has suffered the same fate. However, science does not declare the existence of a “burnt-hand” disease or illness (unless someone wants to know why a person would keep their hand on a hot stove). Because the sense of pain is essential to the feedback mechanism that generally and naturally removes the hand from the stove, pain caused by the “burnt-hand” illness should be managed, controlled, or regulated – with medications if necessary – *only as a temporary measure while the body heals and rehabilitates from the injury*. Pain has a very significant evolutionary function, and usurping this function with medications for healing will have dire consequences for the individual.

The *illness* in mental illness arises when healthy conscious – or unconscious – responses to the cognitive-emotional biofeedback control mechanisms are absent, and the individual does not have the cognitive-emotional capacity, agility, or wisdom to respond to their emotional awareness in a natural and healthy manner and remove their cognitive activities from whatever their “hot stove” is. However, is this lack of emotional responsiveness an illness or an injury (Kolk, 2015)? Emotions have a function. Emotions bring about conscious awareness of the health, or lack thereof, of cognitive activities. Feeling good correlates with healthy neurological and biochemical physiology, and feeling bad

17.0 Hot Stove Analogy and Depression's Signature Physiology

correlates with unhealthy neurological and biochemical physiology (Davidson & Begley, 2012). Psychological and pharmaceutical therapy must honor these functions and work to re-establish the normal functioning of an evolved emotional awareness and control mechanism.

From the perspective of cognition-as-cause and emotions-as-effect theory, the biology of a neurological, biochemical, and physiological “abnormality” associated with emotional pain (such as depression) is analogous to the neurological, biochemical, and physiological “abnormality” associated with the hand’s physical pain on a hot stove. The more that emotional pain is (1) ignored, (2) suppressed, (3) usurped, (4) biochemically blocked, (5) sedated, or (6) unacknowledged for any reason such that the individual’s thoughts and cognitive activities remain on the “hot stove,” the more the associated neurological, biochemical, and physiological signature and processes will be pathological and differ from those of a “normal” healthy person (Draud, et al., 2011). The issue here (which could include diseases, trauma, and hereditary disabilities) is the lack of responsiveness to emotional pain, which seeks to disrupt the mind from a potentially damaging mental stream of consciousness. The semantics between emotional regulation and cognitive regulation through emotional awareness is critical.

Negative feeling emotions, feelings, and moods that can lead to depression are analogous to “burnt-hand disease”, where the issue is not the “pathological” biochemical signature (Maletic & Raison, 2017) but why a person would ignore their “feels-bad” emotional perceptions and keep their mind, or more specifically, their cognitive activities of knowing and awareness upon a mental hot and burning stove? Emotion has an evolved meaning and significance. Emotionally negative neurological and biochemical physiology

can be vital for short-term survival within the fight, flight, or freeze mechanism and for bringing clarity and meaning to an undesirable world, but sustained, long-term effects are detrimental to an individual's health, well-being, and success. More specifically, negative and positive emotional feelings have evolved as a control mechanism to guide cognitive behavior towards individual health, well-being, and success through effective decision-making and resonating behavior.

This is in direct opposition to current psychological theory, which holds that emotions produce different physiological, behavioral, and cognitive pathologies (Emotion, 2020), and therefore, aberrant, destructive, and dangerous emotions should be regulated, controlled, and managed, even with the use of pharmaceuticals (Barlow, 2014; Gross, 2014; Maletic & Raison, 2017). This current psychological theory states that emotion changes the physiology of the brain and body that causes emotion. Mathematically speaking, this theory argues that X changes Y, and the result is X. Does that even make sense?

Emotion should also be understood as a verb. Feeling an emotion means a person is cognitively active... perceiving, conceiving, remembering, reasoning, judging, imagining, and problem-solving. Unlike the reflexive action of removing a hand from a hot stove after feeling pain, emotional pain allows time and space for the analysis, understanding, and comparison of any number of challenging cognitive behaviors, their outward expression, and inherent ethical and emotional attributes. Rather than being a separate and singularly focused class in psychology, the understanding and education of a biologically evolved cognitive-emotional biofeedback and control mechanism should be an integral part of every aspect of primary and secondary school curricula. Emotions as a biofeedback and control mechanism

17.0 Hot Stove Analogy and Depression's Signature Physiology

can be used to understand, guide, reframe, and refine enslaving, harmful, and vulnerable cognitive activity into positive, robust, healthy, and empowering cognitive activity that gives meaning and vibrancy to life (Nussbaum, 2001, 2018).

The connecting processes between cognitive activities that feel emotionally positive and those that feel emotionally negative are the foundation for individual, cultural, and societal regeneration and rebirth and the creation of something new: “I am emotionally aware of what I don't want. Now, what is it that I do want and desire? What action, mental or physical, can I take now, today, and tomorrow that will make me feel good (and lead me off of my emotionally negative journey and onto my emotionally positive journey)?” Happiness is not something a person attains and therefore possesses like a house or a car. Happiness is a continual journey of re-processing cognitive activity from the emotionally negative into the emotionally positive.

The neuroplastic networks that supported a reality and cause of suicidal depression, psychotic mania, and schizophrenic tendencies yesterday – those same neural networks have the physical plasticity to change today and no longer have the capacity to support that pathological reality and behavior tomorrow.

18.0 The Evolution of Antisocial Personality Disorder

Because of the brain's neuroplastic ability to develop alternate networks, more advanced mental constructs of wanting and desire can develop as a person matures. Combining internal physiological behaviors and external physical exertion to ensure survival

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also means a more complex development between the biological body and emotions than one might assume. Early humans' movement to gather food or even hunt on the African savannah meant survival. Thus, a correlation between emotional pleasure and physical activity was evolutionarily advantageous.

Although the joy of the hunt and the pleasure of gathering may produce the food needed for survival, continual exertion risks heat exhaustion, dehydration, and death during the heat of the day. Rather than being a mere pawn of pleasure and pain, one must decide whether to continue hunting in such adverse conditions, with the survival of oneself and one's family (compassion) as a possible outcome and the death of the hunter and those dependent on the hunter's survival as another. Alternatively, the hunter's survival alone may become evolutionarily advantageous.

Thus, the neuroplasticity of the cognitive and emotional networks involves a level of complexity that permits cognitive reflection on the conditions for physical exertion and the weighing of the conflicting factors of feeling good while obtaining food and feeling bad because of the heat. The success or failure of these reflections and choices might spawn different genetic lines with different values and behaviors. One emphasizes the individual's survival, and another emphasizes compassion and the family's survival. One genetic line may care about other people; another may not. Therefore, "antisocial personality disorder" would not be considered an actual disorder; rather, it would be a natural part of some individuals' evolution. Any successful interaction with these individuals – whether individually or as a society – must recognize and respond to their lack of capacity for

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compassion, understanding, and kindness except when it pertains to their well-being and interests.

19.0 Improving the Efficacy of Evidence-Based Therapies

Well-being and the success of any professional therapy, mental or physical, is not defined by the absence of illness but by the presence of health, vigor, and joy along with the necessary cognitive skills, abilities, and motivations to nurture these conditions by employing one's cognitive-emotional biofeedback control mechanism

19.1 Emotional Dysregulation: Current psychological therapy understands emotions as potentially aberrant and dangerous because it holds that emotions, moods, and feelings change the neurological and biochemical physiology that drives behavior. Therefore, these emotions, moods, and feelings must be controlled, regulated, and managed, and if necessary, this should be done with pharmaceuticals. Because emotions can lead to aberrant and dangerous behavior, emotions are not to be trusted. Cognitive behavior therapies use the intellect to reason out appropriate and desirable cognitive and emotional responses and behavior.

The very first sentence in Homer's *Iliad* laid the erroneous emotional, linguistic foundations for today's evidence-based therapies:

“Goddess, sing me the anger, of Achilles, Peleus’ son, that fatal anger that brought countless sorrows on the Greeks and sent many valiant souls of warriors down to Hades, leaving their bodies as spoil for dogs and carrion birds: for thus was the will of Zeus brought to fulfilment” (Homer, 800-700/2009).

Achilles' *anger* brought countless sorrows. Achilles' *anger* sent many valiant souls to Hades. In this text, the emotion of anger is causal; that is, anger is the cause of Achilles' behavior. This erroneous cognitive-linguistic construct of the mind continues to this day in literature and spoken language and has been an unquestioned foundation of modern evidence-based therapies such as:

1. rational emotive behavior therapy (REBT) (Ellis & Ellis, 2019)
2. cognitive behavior therapy (CBT) (Beck, 2011)
3. mindfulness (Farb, et al., 2014)
4. mindfulness-based cognitive therapy for depression (Segal et al., 2018)
5. eye movement desensitization and reprocessing (EMDR) (Shapiro, 2018),
6. forgiveness therapy (Enright & Fitzgibbons, 2015)
7. positive psychology (Lopez & Snyder, 2009)
8. emotional intelligence (EI) (Salovey et al., 2004)
9. interpersonal psychotherapy (Stulberg et al., 2018)

These therapies use a definition of cognition that addresses the processes of knowing and awareness, such as perceiving, conceiving, remembering, reasoning, judging, imagining, and problem-solving (APA, 2020), where understanding and comprehension can project future consequences and events. These therapies re-process these cognitive activities (Gross, 2014) to help a person attain a better emotional situation (James, 1890; Prinz, 2004) in their lives.

However, is emotion indeed the cause of the physiological changes in the brain and body that drive behavior, which is then perceived as *emotion*? (Does that make sense?)

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Furthermore, should emotions be regulated, controlled, or managed using pharmaceuticals (Gross, 2014)? Is there an emotional disorder (Barlow, 2014; Maletic & Raison, 2017)?

When changes in physiology are integrated into psychology's cognitive-emotion process flow diagrams, all of these questions must be readdressed by science, language/literature, philosophy, religion, and law because *emotion does not change the physiology perceived as emotions* cognition does.

19.2 Cognitive Dysregulation: Emotion-as-effect theory argues that cognition, not emotion, changes the neurological and biochemical physiology that drives behavior. Therefore, cognition must be controlled, regulated, and managed. The emotional experience is the perception of neurological, biochemical, and physiological changes of the brain and body precipitated by cognition. A relationship between emotions and physiology has evolved where good-feeling emotions correlate with healthy physiology, and bad-feeling emotions correlate with unhealthy physiology. Cognitive behavior therapies work because cognition changes the neurological and biochemical physiology that is then perceived as emotions. Cognitive-emotional behavior therapies trust these emotions, moods, and feelings to understand and guide appropriate, desirable, and healthy cognitive behavior.

Rather than demonizing emotions as aberrant, destructive, out-of-control, and in need of regulation because of an emotional disorder, the emotions-as-effect theory understands emotions as an evolved sensory system (akin to the senses of pleasure and pain), giving conscious feedback on the healthy/unhealthy state of neurological and biochemical physiology. Cognition, not emotions, precipitates the neurological and biochemical physiology of the brain and body that drives behavior. Instead of being regulated by

cognitive behavior, emotions, moods, and feelings are used to guide cognitive behavior and decision-making to enhance the individual's health, well-being, and success. The dysregulation of cognition, not emotion, is causal to the aberrant changes in an individual's neurological and biochemical physiology that leads to suicidal depression, psychotic mania, and dysfunctional neurological and biochemical physiology susceptible to disease and illness. Cognitive-behavior therapies work because cognition changes the neurological and biochemical physiology that is then perceived as emotions. The current science of emotional dysfunctional theory and control necessitates the following six warnings:

19.3 Warning 1: Denial of the emotional biofeedback control mechanism.

Emotional disorders (Barlow, 2014) such as depression, anxiety, suicide, mania, bipolar disorder, borderline personality disorder attributed to emotional dysfunction theory are not emotional disorders but cognitive disorders that deny an evolved emotional biofeedback control mechanism. A belief in emotional control, management, and regulation because of the influence of “emotional” dysregulation on a person's neurological and biochemical physiology convolutes emotions' evolutionary role to pivot off of emotionally negative cognitive behaviors towards emotionally positive cognitive behaviors (and its resonating outward expression and behavior). If emotions are deemed untrustworthy because of a false belief that aberrant and dangerous emotions drive behavior, the emotional biofeedback and control mechanism is further sabotaged in fulfilling its evolutionary role.

The emotional rollercoaster ride provided by the entertainment industry through such mediums as movies, television, books, songs, and music is dependent on a certain denial of the evolved emotional bio-feedback and control mechanism to guide cognitive activity

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towards well-being. This suspension of emotional understanding can bleed into daily life and disrupt emotions' role in guiding cognitive behavior, critical analysis, and effective decision making.

19.4 Warning 2: Camouflaged aberrant cognitive behaviors. Any psychological or pharmaceutical therapy that changes a person's natural and evolved cognitive-emotional correlations can camouflage aberrant cognitive behaviors normally exposed through emotional dissonance. These unabated cognitive behaviors can continue to change neurological and biochemical physiology until they erupt uncontrollably into dangerous, psychotic, suicidal, and schizophrenic behaviors. Modern psychology (and research) attributes the power of causality to emotions without integrating a person's capacity to re-process cognitive behavior that solicits other emotional responses. If these emotions, stemming from an "emotional disorder," are managed pharmaceutically, science is again usurping emotions' evolutionary role in accentuating aberrant and destructive cognitive behavior to an individual's conscious attention and awareness.

19.5 Warning 3: Unrecognized defense against illness, infections, and disease.

Neurological, biochemical, and physiological abnormalities that are emotionally perceived may not originate from psychological cognitive activities. Instead, they may be attributed to illness, infection, or disease. However, by consciously working to feel good, the body builds another evolutionary defense for survival. Feeling emotionally good has an evolved correlation with being physiologically healthy and vigorous. Therefore, evolution has set up another layer of resistance to fight off illness, infection, and disease by

consciously working to feel good rather than succumbing to emotionally negative physiological activity.

By cultivating a cultural attitude that dismisses the emotional “dashboard light” of negative emotions and does not recognize the role of negative emotions in informing one’s consciousness that extra effort must be made to maintain an emotionally good-feeling attitude, science is creating a physically weak society. People who have developed cognitive abilities needed to maintain an attitude and mood of emotionally positive feelings empower themselves to survive pandemics such as the COVID-19 pandemic because of good feeling emotions’ correlations to healthy physiology, critical analysis, and successful decision making.

19.6 Warning 4: Misguided action upon an external world. If an individual or patient is never taught:

- (1) how to use their cognitive-emotional biofeedback control mechanism and
- (2) that good- and bad-feeling emotions, moods, and feelings are about their cognitive activities, and
- (3) how these good and bad feelings have evolved correlation with the health and well-being of their neurological and biochemical physiology, or
- (4) even more detrimental, is taught to ignore, constrain, or inhibit this evolutionary biofeedback control mechanism,

they will continually associate and give credit (or fault) to the origins of their emotions, moods, and feelings to an *external* world.

19.0 Improving the Efficacy of Evidence-Based Therapies

An individual or patient will then act upon their external world according to their interpretations, understandings, and beliefs derived from their personal experiences, education, and training through life – even to the detriment of their health, well-being, and success. Feeling good or bad is not about what “I” am doing: “I feel this way because of what ‘they’ and the external world of circumstances, events, and happenings are doing to me. And if they and the world do this to me, how can I act other than what I understand, know, and believe.” We live in a world that validates through religion, media, and law credit or fault (reward or punishment) to those who “make me feel” this way. Feeling good has become about changing, controlling, or acting upon “them” and the external world and punish those who make me feel angry, depressed, or wronged as religion, media, law, and personal experiences have taught and continues to teach.

19.7 Warning 5: Misguided “feels-good-is-good” morality. Because joy has an evolved correlation with health, well-being, and success, we have evolved to be joyous beings. Yet a self-centered feels-good-is-good morality must be tempered within a compassionate awareness of the symbiotic connection between all humanity that demands cognitive-emotional re-processing skill, education, and training.

Rather than rigorously adopting and adhering to a set of feels-good religious, political, or academic set of beliefs and understandings that deny an internal reflection of personal cognitive behaviors, our educational institutions (parents, schools, religions, governments, etc.) must teach, develop, and empower a feels-good-is-good cognitive-emotional dynamic that can rationally and comprehensibly debate the moral dilemmas facing each new generation.

19.7 Warning 6: Literacy can adversely affect natural cognitive-emotional development.

The current linguistic semantics of emotional behavior depicted in secular and religious literature can reinforce a self-indulgent reflexive behavior driven by emotions. This reptilian portrayal of emotional behavior ignores any conscious re-processing cognitive activities towards a behavior accentuated by a better feeling thought. To enjoy the thrill and excitement of a fantasy world and to understand and comprehend the more complex emotional behaviors within the intricacies of some advanced character and plot progressions, a reader must be even more willing to suspend their disbelief and accept a self-indulgent reality of emotions driving behavior. Literacy becomes problematic when natural cognitive-emotional re-processing development is usurped by a singular reality of reflexive and self-indulgent emotional driven behavior void of any re-processing skill, education, and training.

Because joy has an evolved correlation with health and well-being, we have evolved to be joyous beings. Yet a self-centered feels-good-is-good morality must be tempered within a compassionate awareness of the symbiotic connection between all humanity that demands cognitive-emotional re-processing skill, education, and training.

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The neuroplastic world that your mind understood yesterday as reality, will no longer exist tomorrow if you change your cognitive habits today.

“When I came to the point in my life that I understood ‘where I am is not my fault, but it is now my responsibility,’ that is when life started getting better for me.” It takes effort. But if a

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person has the belief and the desire to improve and empower their own life, realize and understand that if a thought doesn't feel good, it's not. If what you are doing in life doesn't feel good, it isn't good... for you or anybody around you. Each person must become their own Super-Hero and learn the cognitive-emotional dynamics of their evolutionary superpowers of strength, agility, stamina, and cunning.

20.1 Redefining Success: Finding the Synergistic Self

The objective of cognitive-emotional education and training is for each individual to learn the skills and abilities necessary and the rationale behind how feeling emotionally better attains and maintains mental and physical well-being of strength, power, agility, cunning, creativity, intelligence, and success. This synergistic mind, body, emotion, and consciousness are available for anyone in whatever endeavors they may adventure into. The cognitive-emotional perception of energy, momentum, and confidence reveals the strength, power, and vitality of the synergistic self.

This section overviews some of the many activities an individual may engage in, and with what cognitive-emotional attitude, to lay the foundation for "feeling it" and creating a momentum of success for life's journey and challenges. The rationale and theory behind these activities can be found in previous discussions.

This all starts with learning how to actuate a cognitive-emotional bio-feedback and control mechanism that has evolved to develop and to maintain an individual's greater power of strength, stamina, agility, cunning, intelligence, and wisdom. The role of the teacher-coach is to introduce learning and training activities that pave the way for the individual to move up

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the cognitive-emotional path of success throughout their lives. How far along the path an individual travels depends on their motivation to take another step, to take one more action, to feel a little bit better, and to achieve a little more. One step may take a moment, a month. It may take two. But no matter the time, the cornerstone role of the teacher-coach is to help individuals take that next step with the promise that when they do, they will feel better and achieve more success in whatever endeavors may come of their lives. At first, feeling better may simply translate into feeling less pain. Eventually, over time, with the development of new cognitive habits, emotional feelings, moods, and attitudes will transcend from negative to positive.

Cognitive-emotional education is about developing the cognitive skills and habits necessary to harness the evolved cognitive-emotional bio-feedback and control mechanism to attain mental and physical well-being, achievement, and success by gaining new perspectives of people, places, and events for effective decision making. Rather than being a segregated component of primary and secondary education, cognitive-emotional education should be an integral aspect of every class, sport, and extracurricular activity. Formal education begins with the first day of class and teaching young students the mindfulness of (1) associating thoughts, body feelings, and good and bad feeling emotions, feelings, and moods, (2) allowing space to not react, but (3) to act with skillful response to cognitive-emotional bio-feedback and control. Also, understanding the difference between (1) utilizing an evolved cognitive-emotional bio-feedback and control mechanism for attaining and maintaining health, well-being, and success and (2) allowing an unrestrained cognitive-emotional experience for entertainment and educational purposes is paramount. With these new perspectives, new opportunities, abilities, and power to

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act and function will be unveiled that were previously masked by old and emotionally negative cognitive habits. And most importantly, such revised cognition causes an individual to feel better.

Cognitive-emotional wisdom means: 1) having the ability to evaluate one's own cognitive activities with one's own emotional control mechanism, 2) having the ability to STOP...and respond to this evaluation, 3) pivoting from emotionally-negative cognitive activities to those cognitive activities that will elicit positive emotions and feelings and, finally, 4) using these new emotionally-positive awarenesses as the basis for constructive decision making and action.

Negative emotions are essential; they are fundamental parts of the equation for an individual's success. Negative emotions are the lower steps of the emotional staircase. Positive emotions are the higher steps. Negative emotions bring an awareness of that which is not wanted (bottom steps) and are used to identify that which is wanted (top steps) (Knight, 2013). The problem and the solution are part of the same staircase. Engineers, coaches, and gamers, for example, have problems to solve. But they don't fixate on what's wrong. They have the unique ability to use what is wrong and "not wanted" to generate solutions and courses of action. Solutions become more apparent after silently exhaling and quieting the knowing of and the fixation upon that which is wrong. "Be still and listen...."

20.2 Motivation to Feel Better

You cannot have a happy ending to an unhappy journey (Hicks & Hicks, 2006). An individual's strength, power, agility, cunning, creativity, intelligence, and success have

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evolved correlations, not to pain and suffering, but joy and feeling good. Therefore, if an individual wants to succeed in school or an athlete wants to succeed on the field of competition, they had better learn to utilize their evolved cognitive-emotional bio-feedback and control mechanism.

The answer to the question, “how do you feel?” depends on what that individual is dwelling upon mentally. Such questions as “tell me, what is going on,” “what is happening,” or “what’s up” coupled with follow up questions such as, “how do you feel about that” or “how does that make you feel” are appropriate to ascertain the current emotional-thought correlations and habits of an individual. The reason for asking these questions is to help the individual begin to understand and acknowledge the correlation between emotions and mental activities: that what an individual is feeling is about what their cognitive activities are and what associations they have developed and nurtured between cognition and following emotional effects.

Answers to these questions will also help the teacher-coach find the desires within an individual’s cognitive-emotional jungle. These desires can be harnessed as motivation to alter an individual’s current, negatively charged patterns of thoughts and actions into patterns of thoughts and actions that feel better. The question “what do you want?” develops focus. An answer demands a “fearless sifting and winnowing” (Wikipedia, *Sifting and winnowing*) of thoughts, experiences, and desires, and redirecting and maintaining one’s focus on that which is wanted and desired and their associated positive feelings and emotions.

However an individual defines success, or what their desire may be, this desire is an important motivation to do the work necessary to feel better. Because of evolution’s role, there must be an underlying desire to feel good, to feel better. Feeling good is also needed for

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activating the underlying neuroplastic changes in the brain necessary for success (Gorwood et al., 2008).

To feel good, to feel better, to be well, is to have a life and work that one enjoys and requires an individual to use their own cognitive-emotional bio-feedback and control mechanism to change those current habits of thought that are limiting their ability to achieve their desires. Work and action are necessary to *not* be angry, sad, disappointed, depressed, and to lessen the emotional pain and to move out of the depths of despair. “Do you want to feel better?” If the answer is yes, then here is where one can start: “do something for yourself every day, something constructive, that helps you feel a little better or feel a little less bad in the present moment.”

20.3 Cognitive-Emotional Re-Processing Exercises

All these following tools are methods for quieting one’s focus and fixation within negative feeling cognitive-emotional activities and allowing less negative or even positive feeling cognitive-emotional activities to emerge into conscious awareness. This list of tools is incomplete. As Aurobindo Ghose states in *The Synthesis of Yoga*, “all life is yoga” (Ghose, 2015), even work itself qualifies as a means to reach a better state of cognitive-emotional self-awareness.

Emotions act as a guide because emotions have evolved to give consciousness feedback via the emotional perception of the body and brain’s neurological, biochemical, and physiological state of being precipitated by cognition. These good and bad feeling emotions have an evolved correlation with healthy or unhealthy physiology. Therefore, with their

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emotional awareness, an individual can evaluate the health, well-being, and success of their cognitive meanderings.

The Book of Human Emotions: From Ambigophobia to Umpty – 154 Words from Around the World for How We Feel (Smith, 2016) is an education in itself for understanding the cognitive-emotional mind. Each word has a causal cognitive (thought) aspect and an associative emotional (feeling) aspect. If one were so inclined to dive into the intricacies and depths of the cognitive-emotional relationships, this would be a good place to start. But rather than understanding the particulars within basic and complex emotions, it is far more important to develop an awareness of what is working and what is not working towards feeling better.

The tools, processes, and areas of study that follow present possible activities that an individual can initiate to redirect any downhill slide into negativity upward into an emotionally positive cognitive knowing and awareness. These processes are incomplete and experts exist in all of these areas. This list is a start. An individual needs to develop their own resources and expertise for reconfiguring and managing their own cognitive processes towards their intended outcome.

Any fixation anchors the mind in what is and prevents sailing towards what could be. But before weighing anchor, understand the currents, check the weather, and get a fix on a guiding star.

20..3.1 Segment Intending (Hicks & Hicks, 2006): A Sports Analogy

In sports, how many thousands of hours have a professional athlete devoted to the physical and mental game of their sport? How much time and energy have they devoted to

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their physical training, skill, and reflexive development to be successful in competition? Now, how much time and energy has been devoted towards developing the feeling good moments that are necessary for the synergistic harmony of the mind, body, emotions, and consciousness to successfully actuate all this training, skill, and reflexive development in competition? Success, however it is defined, starts with developing the necessary physical and mental skills of a sport *AND* learning how to actuate a cognitive-emotional bio-feedback and control mechanism that has evolved over millions of years to develop and to maintain an athlete's synergistic power of strength, stamina, agility, cunning, intelligence, and wisdom.

In sports, when a coach plans out a practice session, they map out “segments of intention”. That is, the coach plans out what they want to accomplish overall in today's practice and within each segment of the practice. Each segment of the practice will have a stated intention of the desired outcome they want to accomplish. Without knowing what is to be accomplished, the coach has no way of evaluating what the athletes are doing.

The same scenario applies to the individual athlete. Although the coach is defining each segment of practice, the athlete has an active role in doing the mental and physical work towards accomplishing these objectives. They are flowing energy towards an outcome. The flow of energy is just that, flow. Like a ball, this flow of energy must move towards an objective, towards whatever an athlete is dwelling or focused upon. The question is, does this flow have the good feelings that signify a physiological harmony of success or does the flow have the bad feelings of a physiological dis-harmony of failure. The purpose of segment intending is to 1) define the goal or objective of the moment, 2) focus “feeling good” energy

towards that which is desired and wanted within that moment, and then 3) act within this feeling good sphere of influence.

As an athlete is developing the physical and mental skills of their sport, they must also develop their abilities to attain the complimentary feeling good moment that signifies that their mind and body are consciously in a synergistic harmony towards actuating these physical and mental skills.

As was discussed previously, good feeling emotions, moods, and feelings have an evolved correlation with a healthy neurological and biochemical physiology. Feeling good indicates that the athlete's neurological and biochemical physiology of the mind and body are effectively working together in harmony. What the mind "sees" is in harmony with what the body "does". The question remains, can an athlete, in the heat of competition, bring together the good feelings necessary to perform at their peak when "everything" rests on the successful actuation of their physical and mental skills, reflexives, and abilities right now, at this very millisecond?

Each moment of every day is filled with a vast array of segments that offer an opportunity to come to a feeling-good place. Every moment of every day is an opportunity to develop the necessary *cognitive-emotional* skills and understandings necessary to compete among the best athletes in the world, no matter at what level they are currently at. An individual's day is filled with activities and events. As an individual puts energy into each activity or event, be it physical with the body or mental with the mind, they are flowing energy towards an outcome. The flow of energy is just that, flow. Like a ball, this flow of energy must move towards an objective, towards whatever an athlete is dwelling or focused

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upon. The purpose of segment intending is to focus “feeling good” energy towards an outcome that is desired and wanted within each segment of time activity.

As an athlete practices and intends the desired outcome within each moment-to-moment daily activity, their emotions, moods, and feelings are calibrated towards that outcome. These feeling good or feeling bad emotions, moods, and feelings will then, simply and effectively, convey a vast amount of intellectual cognitive understandings and knowing of this present instant of time. At the moment of truth in an athlete’s career, in that moment when “everything” is at stake, do they “feel It” or is there the gut-wrenching emotion of failure? Or have they learned to block millions of years of evolution and they don’t emotionally feel anything and have no idea of how in harmony, or not, the neurological and biochemical physiology of their mind and body are? The next few seconds will tell the tale, for all to see, of the effort devoted to practicing and understanding the emotional good feelings of successful segment intending.

20.3.2 Mindfulness (Segal, et al., 2013)

Traditional mindfulness exercises dwell within the mind and detach from thoughts, realizations, and imaginations, allowing them to pass through like clouds drifting by on a warm sunny day. This detachment extends to emotions and the strong passion within emotional wants and desires and to refrain from acting out because of these perceptions. This may be necessary when strong overpowering cognitive activities dominate and precipitate uncontrollable neurological and biochemical physiology in the brain and body perceived as commanding emotions, moods, and feelings. It is important to realize and be mindful that

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like a sliver causing pain in a finger, the pain is the messenger and the problem is the sliver. Emotions have not evolved to be disregarded, but to be engaged with and understood as a function of cognition.

Every moment of every day, an individual can be mindful of their routine activities; getting up, fixing breakfast, activities at work or school, etc. Instead of habitually and mindlessly living throughout the day, each segment of an individual's daily life is an opportunity to intend an outcome and align their emotional being to that outcome. Every day provides opportunities to be mindful and to create a synergistic harmony between mind, body, emotions, and consciousness. Every moment offers an opportunity to exercise a cognitive-emotional harmony that feels good. By being mindful of these moment-to-moment successes in everyday segments, life is no longer an extraordinary event that demands extraordinary excellence and achievements.

20.3.3 STOP! Don't Go There: The Conscious Power of Choice

Negative feeling emotions mean something. Negative feeling emotions should highlight a big red STOP sign that means stop! Don't go there; wherever an individual's emotionally negative cognitive activities take them, they activate an unhealthy neurological and biochemical physiology and weaken the brain and body. A path may be genetic, a predisposition, or a learned association. However the path was built, an individual's negative emotions mean that they need to re-process their cognitive activities of knowing and awareness (APA, Cognition; LeDoux, 2019; Prinz, 2004) into an alternative knowing and

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awareness that activates the good feeling emotions of a healthy and vigorous neurological and biochemical physiology.

Maybe a subject is so vast and unyielding that the only solution is just to “don’t go there.” There is no solution, viewpoint, or aspect that elicits positive emotions. Avoidance may not be “how I was brought up” or “politically correct,” but it may be necessary for an individual’s health and well-being. “That is not your problem” may be the best advice a teacher or coach can give for developing an individual’s health. (Note: Some individuals, like the gamer, engineer, or coach, can dwell upon that which is “not wanted” with some pleasure to problem solve and create alternate and more desirable realities (Knight, 2013).

20.3.4 Having Compassion for Self

Many people can manifest compassion for an individual or animal having a difficult time, but they fail to sympathize with themselves. “Give yourself the same compassion you give to others and stop using your mind to beat yourself up. Do these thoughts feel good? If not, let us work together and find ways to stop this self-inflicting torture.”

There is an important lesson here in valuing personal health and well-being and the role of the personal cognitive-emotional bio-feedback and control mechanism over the values imposed by society and others. For example, fixating on hunger, poverty, torture, abuse, and all the world’s injustices or on the COVID-19 epidemic can become overwhelming. If an individual cannot engage a subject with the self-compassion needed to emotionally feel good about their own understanding and place within that world, then perhaps it is a subject for them to put aside for the present moment.

20.3.5 Meditation, Mindfulness, and Contemplation

Meditations and mindfulness are healthful activities whose function is to remove consciousness from the mental chaos generated by daily life. Meditations and mindfulness refocus one's cognitive activities away from life's busy illusions to bring into focus a reality within one's breathing, within the flame of a candle, or within whatever one has as their object of attention. Mindfulness is the practice of focusing upon and carefully observing or being "mindful" of the goings-on both within and surrounding one's person. The key is not to latch onto or fixate upon the mind's negative meanderings and detach from and allow any adverse thoughts, sounds, images, or other cognitions and emotions to pass through..... By slowly quieting the turbulent thought processes of the mind, meditation and mindfulness removes one's attention from what is and allow the quiet revelations of what can be.

More mentally active, guided meditations occur when someone leads the thought process. Yoga and tai-chi are even more active meditations that involve the movements of the physical body. Running, biking and rowing are activities that may also be utilized and have the meditative quality of quieting the turbulent mind. Monitoring the emotional state is essential to the effectiveness of any meditation activity. These methods of detachment, calming the mind, and "emptying it of thought" can stop the emotionally negative cognitive activity. An individual will feel better because the mental activity has been removed from any subjects of angst, allowing emotionally positive cognitive activities to reassert themselves. The natural fruit of this labor comes when this new, more emotionally positive cognition is contemplated and allowed to grow and prosper after the meditation process is

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over. Meditation cultivates and prepares the fertile soil of a quiet mind and plants the seed that contemplation, along with emotional guidance, allows to grow and sprout into a wondrous new world.

Do not fixate on the broken and mangled hand, for it is indeed a soreness to any beholder. The message is not within the hand, nor within the moon and stars at which it points, but rather lies within another Universe that surrounds us – known only through its quiet revelations.

20.3.6 Appreciating and Reframing

To appreciate an event, place, subject, or person means to find something of “value” within them to focus on, which stimulates positive emotional responses. To appreciate a situation means to find something of value within the situation to focus on. Appreciation means to make the effort to dwell on some aspect of an individual, place, or event that brings about good emotional feelings. Appreciating nature is a wonderful method for extricating oneself from the harsh “realities” of a negative world and into another, a more favorable “reality” of the beauty and marvel that also exists in our world.

Reframing involves just that, putting a new frame around the picture. “This rain means we can’t go for our walk, but we *can* catch up on our reading.” The subject matter doesn’t change. It hasn’t stopped raining, but the rain’s positive attribute towards life’s circumstance is brought forward, and the emotional state improves. Or, as the saying goes, make lemonade out of lemons. Instead of looking at the overwhelming task presented by the thought that “the whole world is a mess”, reframe the massive job of fixing the world into a practical task of cleaning one room or one corner, or even to start with, a drawer within my

part of the world. Another type of reframing is to step back from a discussion's emotionally negative subject and take a more general view. A rose is a lovely flower, but it is an entirely different plant if one only sees the thorns.

A related challenge is found within these common phrases: *it is good*; *it is bad*; *it makes me happy*, or *it makes me sad*. All these common phrasings place the responsibility of one's own emotional state upon that which is outside the "self" or "I" or "me" without realizing that there is a conscious power of choice to dwell upon that which is wanted or that which is not wanted. No matter how an individual has learned to issue responsibility of one's own emotional state to external factors, healing involves owning one's power in creating "my own" emotional state of being by "my choosing" precisely what to dwell upon consciously.

Remember, the primary goal in these exercises is to bring about an emotionally positive cognitive activity that correlates with an individual's power, strength, stamina, agility, cunning, intelligence, and wisdom. If finding an emotionally positive aspect is currently unattainable, it is best to gaze elsewhere.... "The sky is beautiful today, is it not?"

20.3.7 Focusing on That Which Is Wanted

"What do you want?" is a question to bring focus and to identify a subject of desire that brings forth positive emotions. An individual knows when they dwell upon "that which is wanted" when positive emotions come forward. Negative emotions come from looking at or dwelling upon such people, places, and events an individual *doesn't* want. "You have told me what you don't want [feels bad]; now tell me about what you do want [feels good]"

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(Hicks & Hicks, 2006). The presence of positive emotions within the conversation may be attributed to success in changing the subject from the *lack* of that which is wanted to the presence or refocusing on that which is desired. Continual discussion around these emotionally positive subjects lays the foundational touchstones for moving up the emotional staircase to where more joyous and healthy activity resides. At first, these touchstones may just be less painful. Yet, with continual work, movement up the emotional staircase will eventually bring continual, emotionally positive results.

Individuals can't focus on what they don't want and simultaneously have positive emotions. They may use positive words, but nothing changes if the emotion behind their words is still negative. When words and phrases are positive, but the emotional state behind such words remains negative, mental activity is still negative and unhealthy. Which emotional feelings are connected to what mental activities are the guiding factor? Focus and awareness need to be continuously upon one's own changing emotional states and upon emotions more general, long-term moods, and attitudes. This is an essential aspect of emotional mindfulness (Segal et al., 2013). When positive words reflect positive emotions and negative words reflect negative emotions, communication becomes honest and harmonious. A conversation revolving around an emotionally positive subject now leads towards health, well-being, and success. The challenge is to continue modifying the subtext of the conversation towards a healthier direction and elicit more positive emotions.

Contrary to normal diminishing ones focus within "that which is not wanted", the engineering, coach, teacher, and gamer mind (as in chess) seem to develop positive emotions

while identifying and holding a problem in stasis and simultaneously searching for and allowing solutions to “come to mind.” (See: *The Power of Negative Thinking* (Knight, 2013).

20.3.8 Acts of Kindness

A healthy lifestyle means living (and acting from) an emotionally positive place. Emotionally positive actions develop another pathway to an overall healthier lifestyle. One method upon this road is acts of kindness. This extends the mental exercise of appreciation outward and into the world and begins unveiling a new life of well-being. A kind act may be as simple as petting a dog or a cat, smiling at a waiter or waitress, cleaning a room, or washing a car. The good feelings of a kind act toward oneself and others make the reality of an emotionally positive world more real. It stands as a great contrast to the emotionally negative world that an individual is leaving behind.

20.3.9 Distractions

Sometimes reframing may be too difficult. Then, instead of continuing to fixate on a subject of angst that is just too unyielding to remold into a better feeling accord, it may be time to step away from the issue and go somewhere else mentally. The object here is to radically change one’s focus and ultimately distract the mind (and its current emotionally negative and unproductive activities) onto something that provokes emotionally positive feelings. Go to a movie. Read a book. Enjoy a bike ride or a walk in the park. If the emotions improve, then the distraction is working. The subject of angst can then be re-approached later with a clearer head.

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An odd correlative approach is to go to a *more* emotionally negative movie. The old unyielding cognitive activities would be displaced onto a different scenario (the film) from which it may be easier to move into more positive emotional states of being. But this could also go the wrong way...

Going to a bar for a few drinks with friends can be a very effective means of distraction. But, much too often, this distraction, just like drugs and medications, may be seen as the final solution, and the subject of angst is never re-approached and resolved. An individual's cognitive-emotional bio-feedback and control mechanism has been corrupted and can no longer appropriately manage cognitive behavior for an individual's health, well-being, and success.

20.3.10 Creative and Memoir Writing

Creative writing, especially the writing of one's memories, can be very therapeutic by reconstituting past traumatic events into new and innovative meanings that can be used as stepping stones into healthy cognitive-emotional processes. Writers would benefit from an instructor with solid psychological and therapeutic skills to safeguard from personal wallowing and dwelling within old and traumatic events rather than using these events as stepping stones (or springboards) into emotionally positive desires, visions, and dreams. Writing and bringing old traumas to the light for others to read should be just that, bringing trauma into the light where these events are exposed for personal purposes of self-transformation into a new, exciting and healthier lifestyle where the mind, body, emotions,

and consciousness harmoniously work together to bring a feeling of new peace, happiness, and joy. (Ref: background reading, Bandler, R., Grinder, John., (1975) (1976))

Note: Traumatic events can be more demanding and need special attention. Reference **Section 8.9: “PTSD/Trauma and Addiction Corrupting the Cognitive-Emotional Relationship” (Jackson, 2022).**

20.3.11 Reconstructing Gut-Wrenching Memories

Debilitating and gut-wrenching memories can be re-processed into something palatable by reconstructing those memories. NLP (Neuro-Linguistic Programming) uses techniques to re-set the stage by changing an individual’s reliving gnawing events involving the five senses: sight, hearing, smell, taste, and touch. These sense “modalities” have “sub-modalities” that can be adjusted or altered so that the emotional feelings associated with the event change. The visual modality has sub-modalities such as brightness, color, hue, contrast, size, and position within the mind that can be altered. A scene can be made brighter or dimmer, and like the lighting on a stage, the overall hue can be changed by adding different color gels in the lighting. (Author’s Note: I have found great success in immediately overlaying a series of different colors (green, violet, purple, red, yellow, blue, and so on) on my relived gut-wrenching events and memories.) When a “critical sub-modality” is found, the actual emotional feeling of the event will change quickly and sometimes permanently. Finding and changing a critical sub-modality can be, for some, a life-altering event that will allow the centeredness, peace, and freedom to acknowledge and pursue one’s own desires in life (Hartmann, 1998).

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20.3.12 Hobbies and After School Extra-Curricular Activities

Hobbies and after school club activities such as drama, chess, car, soccer, swimming, fishing, karate, yoga, dance, cheerleading, or whatever, all should be undertaken with the idea of exercising one's mind, body, emotions, and consciousness' synergistic relationships with emphasis on segment intending and utilizing and developing the cognitive-emotional bio-feedback and control mechanism.

This is training for a healthy lifestyle after graduation. Isn't one of education's objectives to develop the skills, habits, and abilities needed for success in life? Exercising and developing the cognitive-emotional bio-feedback and control mechanism could arguably be the essential function of education. Successfully utilizing all other academic skills depends on maintaining a healthy and synergistic mind, body, emotion, and conscious relationship.

20.3.13 Music and the Arts

Training in music and the arts is significant because these disciplines reach into the cognitive-emotional bio-feedback and control mechanism and demand an outward expression to an audience. Reaching inward and identifying emotional states is a considerable step toward harmonizing one's own cognitive-emotional symbiotic relationship. Music and the arts can provide an opportunity to bypass confused and convoluted cognitive activities by requiring a concentrated focus on the inner harmonies of thought and emotion. Music and the arts can also express agitation, anxiety, nervousness, fear, and apprehension.

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Whatever the desired effect, a sense of understanding and connection between the harmonies of mind, body, and emotions is required. But for following one's own cognitive-emotional bio-feedback towards health and well-being, there is only one key signature.... joy.

20.3.14 Cross-Training: Performance Enhancing Activities

Within a primary and secondary school educational curriculum, all organized sports benefit physical health and well-being. In addition, other organized sports provide great opportunities to promote lifelong habits towards mental health, well-being, proper human development, and effective decision making through segment intending and emotional guidance. For an individual to do well is both satisfying and rewarding. Enhanced physiology for peak performance in whatever an individual is involved with is a function of feeling good. Its evolved correlation with an individual's synergistic self of strength, power, stamina, agility, cunning, creativity, intelligence, and wisdom. Dedication to pivoting off of emotional negative cognitive activities and onto feeling good cognitive activities in any sports activity means developing the habits towards, and strict adherence to, a protocol of utilizing the evolved cognitive-emotional bio-feedback and control mechanism.

Although excitement may bring forth good feelings, over-excitement indicates a new neurological and biochemical physiology that has yet to be integrated into the harmonious synergy of mind, body, emotions, and consciousness needed for competition. Negative attitudes and nervousness hinder an individual's synergistic performance potential. Negative emotions indicate an altered neural circuitry and a diminished neurological, biochemical, and physiological balance from the natural performance-enhancing attitudes of confidence and

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invincibility. Record-setting performances come from physiology found within emotionally positive states of being.

An individual's life will benefit from the cognitive skills and training developed to utilize the cognitive-emotional bio-feedback and control mechanism for performance enhancement during athletic competition.

20.3.15 Religion, Mantras, and Prayer

To Walk within God is to Walk within One's Own Joys, Loves, and Passions.

Many aspects of the world's religions pertain to easing the mind of its burdens. There are the Sufi dances of peace; there are the Hindu practices of yoga – which means union with God; and Buddhist meditations for enlightenment to reach Nirvana and the cessation of suffering, and the songs of Jewish cantors or Christian chants have a similar effect. Religious practices can be explored by those who are so inclined. Personal emotional awareness and wisdom are essential because within religion are ideas and beliefs that, rather than bringing about an experience of salvation and peace, simply invite “hell on earth.” Christianity is not about rounds of rebirth and suffering, but to live this life, not in pain, but forgiven and in the love, peace, and joy he brings: “on Earth as it is in Heaven”.

“Let go and let God” or “trust in Allah” are just a couple of examples of how religious beliefs can be used to bring about emotionally positive cognitive activities. The subject of forgiveness may be about someone and their transgressions, but, most importantly, forgiveness is for the injured victim. Forgiving someone is an act of letting go of an

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experience so that a new life may begin. Forgiveness is a way for an individual to move on with their life to be “reborn” into a better existence. Other words of comfort may include:

- 1) “When I let go of what I am, I become what I might be.” Lao Tzu
(brainyquote.com)
- 2) “May God console you among the other mourners of Zion and Jerusalem
Ha'makom yena'hem etkhem betokh she'ar avelei Tziyonvi'Yerushalayim.”
(myjewishlearning.com)
- 3) “Sadness is the heart telling you to find Allah. Depression is not listening to your heart. Comfort is remembering Allah is always there.” Yahya Adel Ibrahim (islamicquotesdb.com)
- 4) “The LORD is my shepherd; I shall not want....” Psalm 23 (King James Bible)
- 5) “Wherever you go, go with all your heart.” Confucius (goodreads.com)
- 6) “Happiness radiates like the fragrance from a flower and draws all good things towards you.” Maharishi Mahesh Yogi (brainyquotes.com)
- 7) “There is no path to happiness: happiness is the path.” Gautama Buddha (quoteideas.com)
- 8) “Before becoming a Sikh, a Muslim, a Hindu or a Christian, let's become a human first.” Sri Guru Nanak Dev Ji. (<https://beartales.me>)

The beauty of all religions is enhanced with a cognitive-emotional awareness and understanding of how emotions guide and augment cognitive awareness towards love, joy, and peace.

20.3.16 Touchstones

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Any object, event, or odor can also be a reminder of an emotionally positive moment. Pictures, for example, are very common keepsakes. Smells, songs, and music have a unique way of quickly activating thoughts, mental activities, and related emotional responses. Understanding what personal touchstones can draw out emotionally positive thoughts is another aspect of emotional rehabilitation.

The opportunity to stop old habits of thought and to develop new habits of thought presents itself many times throughout the day. Objects, events, and odors can also quickly bring back memories of abuse and trauma. Daily negative flashbacks are a burden. But each flashback is an opportunity to soften its reality and put some distance between today and past traumas. (Ref: **Section 8.9 “PTSD/Trauma and Addiction Corrupting the Cognitive-Emotional Relationship.”**) An individual doesn’t have to search and explore one’s inner self for negative experiences to be dug out like a weed. When the weed appears, you can work on it and dig it out. But until then, let these seeds lie dormant.

20.3.17 Psychological Therapy

Evidence-based practices such as rational emotive behavior therapy (REBT) (Ellis & Ellis, 2019), cognitive behavior therapy (CBT) (Beck, 2011), method of levels therapy (MOL) (Mansell et al., 2013), mindfulness (Farb et al., 2014), mindfulness-based cognitive therapy for depression (Segal et al., 2018), eye movement desensitization and reprocessing (EMDR) (Shapiro, 2018), forgiveness therapy (Enright, & Fitzgibbons, 2015), positive psychology (Lopez & Snyder, 2009), emotional intelligence (EI) (Salovey et al., 2004), and interpersonal psychotherapy (Stulberg et al., 2018) all center around an individual’s

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motivation, ability, and skill to re-process cognitive activities (Gross, 2014). These cognitive activities are ultimately evaluated by the existence of good- or bad-feeling emotions. This is the use of emotions-as-effect and emotional control theory.

Therapy based on the symbiosis between cognition and emotions reaffirms an evolved biological guidance mechanism where emotions are used to evaluate cognitive behaviors. In stark contrast to emotional regulation, with this approach, emotions are not regulated but are used instead to regulate, that is, to guide cognitive behaviors. Also, emotions are not viewed as out of control in this context, nor is there a concept of emotional disorder. On the contrary, the cognitive mind is out of control, and the therapeutic process addresses a cognitive disorder. Deviant emotional perceptions are reflections of this aberrant cognitive behavior. The emotions are not treated as dysfunctional but are understood as very functional. They bring to consciousness the dysfunctional aspect of the mind's cognitive activities that create the aberrant neurological and biochemical physiology we perceive as emotions. It is these irregularities in cognitive behavior that need to be addressed. Emotions are but the messenger.

“What do you want?” is a question that brings about an emotionally negative response if the person is dwelling within the cognitive constructs of the not wanted or lack of that which is desired. Our evolutionary reflexes move consciousness from the not wanted into cognitive activities of what is wanted. The therapist's role is to aid in their person's understanding of this process and train and develop the cognitive-emotional skills necessary to pivot cognitive activity from that which is not wanted to the cognitive activity of that which is wanted.... from feeling bad to feeling good. Emotions are the guiding light

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regarding the success or lack of success in this change of focus within the cognitive mind.

Neuroplasticity of the brain means that everybody has the capacity to realize a new and more beneficial reality because the brain can rewire itself and create new circuits of understanding and alternative healthy behavior (APA, Neuroplasticity; Costandi, 2016, Doidge, 2015).

The symbiotic nature of cognition and consciousness enables an individual to ferret out what is wanted from within that which is not wanted. This nature also enables an individual to acknowledge that which is not wanted (or focus on the lack of what is wanted) from within that which is wanted. Cognition and consciousness have an essential biological function to maintain a healthy and vital neurological and biochemical physiology. Emotions have a function. Emotions bring awareness to the consciousness of health or lack thereof of cognitive activities. Feeling good correlates with a healthy biochemistry, and feeling bad correlates with an unhealthy biochemistry. Psychological and pharmaceutical therapy must honor these functions. Mental illnesses arise when healthy responses to the cognitive-emotional bio-feedback and control mechanism are absent. An individual does not have the cognitive-emotional capacity, agility, or wisdom to respond to their cognitive-emotional bio-feedback in a natural and healthy manner to get their mind off the hot stove.

A loss of a sense of agency (SoA: the sense that I am the one who is causing or generating the action) and a loss of a sense of ownership (SoO: the sense that I am the one who is undergoing an experience. For example, the sense that my body is moving regardless of whether the movement is voluntary or involuntary) (Gallagher 2000) are symptoms of schizophrenic tendencies (Gallagher, 2020) and dissociative activities within suicidal depression and psychotic mania that a patient may find some relief from when incorporating

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the mindful self-reflection of their cognitive-emotional correlations and behavior. A sense of agency and ownership may develop when they are encouraged to use the emotions they feel as a control mechanism towards the thoughts, ideas, and other mental activities being generated in their mind and towards any outward expression and behavior they are experiencing. Pharmaceutical therapeutics (that can also generate a loss of agency) may be necessary to form some cognitive-emotional stability before a cognitive-emotional control therapy can begin.

The goal and practice of *psychological rehabilitation* are to utilize the brain's power of neuroplasticity and develop within an individual the mental agility and reflexes to constructively respond to their cognitive-emotional bio-feedback and control mechanism. At first, these steps may go from painful emotions to less painful emotions. Still, eventually, with the development of new habits and mental agility skills, the steps will be from feeling emotionally good to feeling emotionally even better. These skills are the foundation of mental health and well-being and the ability to lead an everyday life.

20.3.18 Pharmaceutical Therapy

Medications can be very effective in “normalizing” external behavior from an observer's perspective, but what are these chemicals doing to the cognitive-emotional biochemical and physiological neural feedback and control mechanisms? What are they doing to consciousness' ability to control and change cognitive activities in response to cognitive-emotional bio-feedback? How can emotions guide cognitive behavior when

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emotional or physiological neural networks are being targeted with artificially introduced chemical agents?

Emotions have an evolved role in guiding cognitive behavior and decision-making. If emotions are perceiving a neurological and biochemical physiology that cognition actualizes, how are emotions out of control and in need of emotional regulation? It is cognition that is out of control, and therefore, it is cognition that needs regulation.

Any pharmaceuticals designed to impact the cognitive-emotional bio-feedback and control mechanism also impact the emotions' correlations with (1) the mind's cognitive activities and (2) the body's neurological and biochemical physiological activities, and (3) consciousness awareness of these biochemical, physiological conditions. Today's psychiatrist's role is to identify biochemical agents that harmonize with the cognitive-emotional neurological and biochemical physiology of an individual and augment their brain's neuroplastic capacity for supporting new constructive habits (APA, Neuroplasticity; Costandi, 2016, Doidge, 2015). The purpose of pharmaceutical therapy should be to assist consciousness's power and ability to manipulate cognition and thus help an individual respond to their cognitive-emotional bio-feedback and control mechanism in a healthy and constructive manner. And as individual conscious cognitive-emotional manipulation becomes more cultivated and less pathological, pharmaceutical intervention and impact can be minimalized with alternative, less constraining medications. That is not within the purview of current pharmaceutical therapy.

20.4 Cognitive-Emotional Wisdom

Emotions have value. They are important. But to have value and to be important, emotions must be used as they have evolved. The presence of negative emotions did not evolve to add fuel to the fire and escalate emotionally negative situations and events down an emotional negative spiral into more negativity. Like a runaway train down a mountain, there will not be a good outcome. The question is, can an individual become the observer-self? Can an individual separate him or herself from the pathos of the moment....and STOP...stop the cognitive activities that are fueling the fire (Goleman & Davidson, 2017)? Can the therapist-teacher help an individual become empowered to stop and act upon a negatively charged situation in a more emotionally positive direction? The quicker an individual realizes that they are on a run-away train, spiraling out of control, the easier it becomes to stop the downward and emotionally negative train of thoughts and actions.

Much of an individual's negative emotion comes from dwelling on the undesirable actions of others. Try telling someone who is angry at someone to look the other way at what they do want to feel better, and that angry individual may reply, "I will feel better when I punch him in the face." Or, "when my brother stops doing that, then I will feel better." That is, when the proverbial "they" stop doing "whatever", then "I" will feel better. To depend on someone else's behavior changing to feel better is a trap. It requires that every person in the world who doesn't do as you like must change. Is that a reasonable expectation? Negative feeling emotion is about what the observer is doing within their interpretation of their reality. The need for action can and should be satisfied, but action from a positive emotional place is far different and more effective than action taken within anger.

20.0 The Cognitive-Emotional Re-Processing Gymnasium

Cognitive-emotional wisdom isn't only about moving up the emotional staircase when circumstances and events are conducive to upward movement; it's also about having the discipline and fortitude to resolve the internal struggles and to create the mental and emotional harmony necessary for action when circumstances and events are not conducive to upward movement. Too many people have the unfortunate life circumstance in which the motivation for stopping the emotional-downward spiral into self-destruction only develops from having already personally followed this path into this barren, despondent wasteland. The fortunate few work and regain their evolutionary roots and relearn how to act from an emotionally positive platform.

An individual may have to focus only on a very narrow and constrained view of the world to access and regain the use of their cognitive-emotional bio-feedback mechanism. An individual's worldview may be limited to a sport, hobby, a backyard garden, or the shadows on the bottom of a pool of water. But as healing occurs and cognitive-emotional awareness, skills, and wisdom develop, broadening an individual's exposure to an increasingly vast and complicated world becomes possible and necessary for an independent and flourishing life experience. Developing the cognitive-emotional ability to function in society is one measure of health. A more significant measure of health and sanity is to enjoy the opportunities life and society offer. Millions of years of human evolution have developed within our species the capacity to use our emotions to re-process and guide our cognitive behaviors towards a life of health, well-being, and success.

21.0 Success in Education (Jackson, 2022)

“Even as the history of our discipline is implicated in systemic racism, such modes of inquiry remind us of literature’s capacities for critique, resistance, and transformation. We resolve to pursue those capacities across all areas of literary study.” J. Brantley, English Chair, Yale University.

Emotional literature appeared in the Western world almost 3,000 years ago with Homer’s *Iliad* and *Odyssey*. Whether for entertainment – poets lifting and casting down their audiences’ emotions like a roller coaster excites and thrills or frightens its breathless riders – or for cognitive awareness and development, reading, understanding, and writing literature are necessary actions in our modern world, as is understanding emotions’ evolutionary role for the maintenance of individuals’ health and well-being. Losing one’s self within the emotional moment, either for the joy, thrill, and excitement of the entertainment or for the educational value of walking within another person’s shoes while being emotionally engaged within a character of a movie, book, play, or ballet (or of any other medium) means suspending natural, emotionally guided cognitive re-processing behavior that has evolved for an individual’s health, well-being, and success. The “entertainment and educational mode” and the “evolutionary re-processing mode” of cognitive-emotional behavior each have their place. The awareness and understanding of both modes of cognitive-emotional behavior must be part of every individual’s education.

Developing a child’s skills and ability to re-process cognitive activities based on emotional feedback is a necessary function of elementary school education. But how does one explain to an elementary school student – in age-appropriate terminology – that “emotional regulation refers to any process an individual uses to influence the onset, offset,

21.0 Success in Education

magnitude, duration, intensity or quality of one or more aspects of an emotional response (Gross, 2007)” (McRae et al., 2012) when emotions themselves are not what should be regulated but should instead be used as feedback to regulate cognitive activities?

In pre-school, a facilitator can help an individual understand, by drawing attention and awareness to the thoughts and what they are thinking about (appraisal) when they are experiencing anger, anxiety, fear, or anytime they are emotionally not feeling good. They play a game of “mystery” and “detective” (Mystery Science Theater) looking for clues on what thoughts, ideas, imaginings, and memories caused them to feel bad. Then the facilitator can remind them of their game of “find a better feeling thought” (Hicks & Hicks, 2006). “Using what we have discovered, what ideas do you have, or can come up with (attention), that makes you feel a little better. You may not be feeling good yet, but feeling better is in the right direction.” When they finally can detect good feelings (re-appraisal), they have “won!” and are awarded a gold star for being a successful research scientist. They can also begin understanding that feeling good is healthy for them and will help them be successful in school.

In primary school, while learning to read, the teacher can point out how a good story gets their attention and emotionally involved similar to the ups and downs, twists, and turns of a roller coaster. The teacher can do the same with a movie, TV show, video, or any other medium. Then the teacher can point out how the emotional ups and downs are part of the story, but they can learn (and should learn), like in life, to put the book down and get off the emotional roller coaster if they are having trouble or can’t get back to a better feeling place. As conflicting situations and circumstances arise, each provides an opportunity to develop different skills and abilities to act, not from a place of frustration, anger, or pain but from a

place of good feeling joy, and happiness (or, at least, from somewhere close to a pleasurable experience).

As students advance in their education, they also can advance in their skills, abilities, and beliefs to re-process negative feeling cognitive-emotional dynamic behaviors into positive, good feeling cognitive-emotional behaviors. They can also begin understanding that emotionally feeling good has an evolved neurological, biochemical, and physiological correlation with health, well-being, and success and emotionally negative feelings with their negation. And they can understand that an evolved neuroplastic brain will reinforce their capability to re-process cognitive-emotional behaviors (and also reinforce their lack of capacity).

These vignettes play out the symbiotic psychology of an evolved three-sided neuroplastic coin. The three surfaces (or circuits/networks) are (1) emotionally feeling good, (2) emotionally feeling bad, and (3) the transitional surface between the two. The coin is neuroplastic and therefore changes in neurology, biochemistry, and physiology will reinforce and sustain the development and cultivation of healthy or pathological cognitive-emotional dynamic processes in the brain and body depending on an individual's learning environment. Therefore, a strong cognitive-emotional re-processing curriculum should absolutely be part of all educational institutions.

Primary school literary and cognitive-emotional health education must include both the traditional linguistic semantics of emotionally driven behavior for its experiential value and growth potential within the vicarious living of others (be they actual or fictitious) and the linguistic semantics of emotional control in the engineering sense where emotions are used as feedback to guide and re-process thoughts, memories, perceptions, imaginations, and logic of

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the cognitive mind towards the individual's health, well-being, and success (as indicated by good feeling emotions, moods, and feelings).

Authors' (of all genres) failure to realize that the "suspension of disbelief" and avoidance of critical thinking includes the suspension of an emotional biofeedback mechanism that has evolved for millions of years to not only protect an individual but to promote their health, well-being, and success. Yet there is potentially great educational value within these emotionally charged and entertaining roller coaster rides. Through the many lives and deaths within each play, experiences, understandings, knowledge, and, potentially, the wisdom of others may be gleaned for the benefit of one's own life and reality. The efficacy of these dynamics will be significantly increased *without* the awareness that emotions have evolved to guide cognitive behavior for the individual's health, well-being, and success.

How long will the academic institutions of early education, language, linguistics, literature, psychology, philosophy, and law continue teaching an erroneous and dangerous cognitive-emotional dynamic regulatory language based in a 3000-year-old literary and religious linguistics when there are, yearly, nearly 800,000 deaths by suicide worldwide (W.H.O., 2019) and millions of other people are being put through a school-to-prison pipeline (LDF, 2018) within conditions of incarceration that only amplify their psychological injuries; and when indiscriminate "random" shootings, bombings, murder, war, and personal dehumanization continues where people and politics have become objects to be controlled, manipulated, and subjugated for the personal greed and satisfaction of a dominate and power-hungry class of tyrants vying for economic and political control within a government of their own making? When will academia review, analyze, and question the psychological

environments their teachings foster within all of these atrocities because they are oblivious to emotions' evolutionary design? The lack of casual and scholarly questioning and review of erroneous emotional linguistics commonly misused in everyday life only adds to these children's misfortune of a lesser god (Medoff, 1979).

If philosophy, religion, and law are ignorant of what drives human behavior and decision-making, how can there be but laws of ignorance and injustice (and disorder, conflict, and crisis)? Justice founded upon falsehood is itself false and unjust.

Emotions (James, 1890; Prinz, 2004) have not evolved to be controlled, regulated, or managed by cognition, as the linguistics of psychology, religion, and literature suggests (Homer, 800-700/2009; Gross, 2014). The status quo of an emotional dysfunction theory that demands emotional regulation and management (sometimes even with the use of pharmaceuticals) is like a walk into Plato's cave (Allegory, 2020). Because of the brain's neuroplastic capacity, a lifetime of secular (and perhaps religious), learning, practice, teaching, and research founded on a belief in emotionally-driven behavior and decision making has neurolinguistically hardwired into humans a reflexive neurocircuitry erroneously devoted to emotional dysfunction theory. For anyone to accept another cognitive-emotional dynamic requires a fierce commitment to science and logic. Outside of Plato's cave, the foundation of another paradigm in cognitive-emotional understanding can be found.

Emotions have evolved for millions of years. They had become a very effective tool giving valuable feedback on the nature of one's cognitive activities. Yet, when Homer wrote the *Iliad*, he began a false inscription of emotions' evolved role in self-empowering behavior, decision making, and creativity to develop and maintain an individual's health, well-being,

21.0 Success in Education

and success. The importance of knowing, understanding, and teaching our children how emotions carry out these primary functions cannot be overstated. How long will academia continue the instruction, edification, and liability of an emotional regulatory theory erroneously based on 3000-year-old literary and religious linguistics?

The success of any educational institution cannot be defined solely by its students' ability to secure cognitive achievements; success must also be determined by an individual's ability to achieve health, vigor, and joy along with the necessary cognitive skills, abilities, and motivation to nurture these learning conditions throughout life by employing their own evolved cognitive-emotional biofeedback control mechanisms.

22.0 Conclusion

The linguistic semantics of “emotional control” is dependent on whether its foundation is within literature or engineering control theory. In literature and current psychology, emotions are causal to the neurological, biochemical, and physiological changes within the brain and body that drive behavior. In the emotions-as-effect theory (founded in engineering control dynamics), cognition is causal to these physiological changes, and emotions are used as feedback to re-process cognitive behavior.

The foundational basis of rational emotive behavior therapy (REBT) (Ellis & Ellis, 2019), cognitive behavior therapy (CBT) (Beck, 2011), mindfulness (Farb et al., 2014), mindfulness-based cognitive therapy for depression (Segal et al., 2018), eye movement desensitization and reprocessing (EMDR) (Shapiro, 2018), forgiveness therapy (Enright, & Fitzgibbons, 2015), positive psychology (Lopez & Snyder, 2009), emotional intelligence (EI)

(Salovey et al., 2004), and interpersonal psychotherapy (Stulberg et al., 2018) is emotions-as-effect theory. These therapies change cognitive behavior to achieve a desired emotional and behavioral outcome. Emotions do change. Behavior also changes (Kolk, 2015; Barlow, 2014). However, what does the symbiotic relationship between mind, body, emotions, and consciousness look like? Where do the positive and negative emotional jigsaw pieces fit in this schema? Emotions-as-effect and emotional control theory provide an answer.

Therapy that acknowledges the evolved correlation between cognition and emotions reaffirms an evolved biological awareness mechanism wherein emotions evaluate cognitive behaviors (**reference Figure 9, page 40**). In stark contrast to the linguistics of “emotional regulation,” in emotions-as-effect theory, emotions are not “regulated” but are used to regulate or guide cognitive behaviors. Additionally, in this context, emotions are not viewed as “out of control,” nor is there the concept of “emotional dysregulation” (Barlow, 2014). In contrast, it is the cognitive mind that is “out of control,” and the therapeutic process addresses a “cognitive disorder.” (Note: within engineering control theory terminology, emotions are out of control and emotional regulation and control is correct - when emotions are an effect and used as feedback within a closed-loop control system to guide cognitive behavior.) Deviant emotional perceptions are reflections of this aberrant dysregulated cognitive behavior. Emotions are not treated as dysfunctional; instead, they are very functional. They make one conscious of dysfunctional aspects of one’s cognitive activities that create the aberrant neurological and biochemical physiology one perceives as negative emotions and biological signature of major depression and other “emotional” disorders. These irregularities in cognitive behavior need to be addressed as emotions are but the messenger.

22.0 Conclusion

The mental health and well-being of a society are determined by its individual inhabitants' mental health and well-being. A culture that is ignorant of emotions' evolutionary role in guiding individual cognitive and physical behavior is subject to all kinds of forces that can misdirect cognitive activities towards nefarious ends. Continual distortions of the evolved nature of emotions as “emotional disorders” described by current psychological, psychiatric, and pharmaceutical institutions as requiring “emotional management and control” only further sabotage the opportunity to use emotions to improve individual and societal mental health and well-being.

Until the true nature of emotions is understood, individual emotional behavior will be continually preyed upon by those who wish to control and subjugate individuals for their selfish interests, be those interests good or bad. Until the true nature of emotions is understood, individuals experiencing hardship are vulnerable to being made tragically complicit in the selfish and corrupt actions of those who wish to control and dominate others (Bandler, 2008; Kenrick et al., 2015). Because feeling-good emotions correlate with health and well-being, nature has constructed an association between feeling good and good morality. It is up to humanity to nurture this morality within the nuances of living in our modern world.

The pain and hardships of life plant the seeds of intent and desire that formulate into individual and personal short, long, and immediate goals. Receiving a formal education on emotions' evolutionary role within human behavior can determine whether these seeds yield a life of creativity or destruction. Societal institutions –parenting, education, religion, politics, and other institutions – all have a responsibility to empower individuals with emotional awareness and the ability to use negative-feeling cognitive activities and behaviors

as a springboard to produce positive-feeling cognitive activities and behaviors. Humanity's future depends on the empowerment and understanding of the moral and ethical complexities of individual decision-making (and following behavior) driven by a biologically evolved “feels good, is good” and “feels bad, is bad” emotional compass.

Ignorance is to speak of desire itself as the cause of suffering rather than understanding that it is the continual cognitive activity upon the lack of that which is desired that is the cause of suffering.

23.0 Emotions-as-Effect Theory

Emotions, moods, and feelings are felt. They are perceived. Although good- and bad-feeling emotions, moods, and feelings (EMFs) vary in duration and level of awareness of associative cognitive and physical behaviors, states, and changes. They all are the conscious perception of neurological and biochemical physiology within the brain and body precipitated by an evolved and nurtured cognitive neural circuitry.

Because emotions, moods, and feelings are perceptions of an internal state of physiology precipitated by cognition, EMFs reflect and provide insights into the nature of this cognitive behavior. Additionally, when EMFs are a perception of states and changes of physiology (and are not causal to these states and transitions) EMFs are neither destructive nor constructive; instead, they are indicators of the presence of very real destructive and constructive (and causal) cognitive behaviors.

Correlations between cognition, healthy neurological and biochemical physiology, and good-feeling EMFs result from millions of years of evolutionary struggle to ensure the

25.0 Research Questions

health and well-being of the individual, as are the correlations between bad-feeling EMFs and an unhealthy one biology. Now, how are these correlations between cognition, physiology, EMFs, and consciousness understood, nurtured, and developed within a society to improve an individual's health, well-being, and success through their successful decision-making and creativity?

24.0 Factorial Analysis of Basketball Players' Shooting Success:

An Experimental Design and Validity Allegory

An allegory: General managers from professional basketball teams around the country wanted to understand the reasons why one basketball player has a better shooting percentage than another that they may draft and acquire those players that will be beneficial to their team's success. In that regard they commissioned: 1) psychologists to study variations in cognitive thinking, emotional states and control, coaching techniques, and family backgrounds; 2) psychiatrists and neurologists to study neurological and biochemical variations in synaptic biochemical type and distribution, eye structures, and perceptual abilities, brain functions, and possible doping and performance-enhancing drug usage; 3) physiologists and physical therapists to study variations in muscle, bone, and fat mass and distributions, bone structures (height differences), arm lengths, and hand sizes; and 4) sociologists to study variations in home environments, economic backgrounds, and high school grades, reports, and disciplinary records.

After years and years of study, thousands of surveys, investigations, experimentation, and analysis, the general managers received all sorts of reports, understandings, and theories of why one player could make more baskets than another. The general managers held

24.0 Allegory of The Basketball Player

conferences where notable scientists presented their studies and reports. Academia set up labs to further study a multitude of related phenomena within their respective concentrations. Classes were structured around these findings. Books were written, textbooks were published....

And then a mechanical engineer walks into the mayhem with quality management and control experience and education and says to management, “Within all those years of study and analysis and conclusions, there haven’t been any quality and specification standards on the diameter of the round bar used in manufacturing each rim, or hoop, that a player shoots into. And therefore, depending on when and what manufacturer made the rim that was involved in each study, the raw data will reflect different results because some rims have a larger relative diameter than others. With the larger rims, any player is significantly more likely to make a basket. Or maybe not and for some reason, players make more baskets with a smaller diameter rim. The point is, that because researchers have not studied, analyzed, and factored in a relevant variable, their data may be skewed one way or another. And until “relative diameter” is recognized and then factored into existing studies, any conclusions and rationale based on those studies are suspect for error.”

I am not saying the diameter of the round bar that makes the rim is not specified. I am asking how reliable are existing psychological dependent studies if variation within an individual’s capacity for re-processing, re-structuring, and re-organizing one’s own cognitive-emotional dynamics exists and is unaccounted for. This paper has outlined the necessary existence of an evolved cognitive-emotional re-processing, control, and regulatory mechanism. If this mechanism exists and hasn’t been academically accounted for, how reliable is psychological and psychiatric science?

25.0 Research Questions

25.0 Research Questions

Because of observability and measurability in humans and animals, there is much emotional research revolving around fear. But fear, with its many philosophical constructs and corroborative research and arguments, is only one aspect of the emotionally negative feeling side of an evolved three-sided neuroplastic coin. What can be reasonably understood and concluded without integrating the other two sides of the coin? The opposing, good feeling side is joyful with its supporting neurological and biochemical physiology. Whereas negative cognitive-emotional feelings such as fear, sadness, anger do, in the short-term function as a much-needed survival mechanism, I contend that the cognitive-emotional positive and joyful state of being has a natural bias because of its unique long-term correlation to health, well-being, and success and a healthy, robust neurological, biochemical physiology.

The third side is a cognitive-emotional dynamic process control mechanism between the two sides and has evolved and functions to maintain an individual's health, well-being, and success. But the neuroplastic brain will maintain and support (to the point of failure) those process networks, whether pathologic or salubrious, that continue to be environmentally stressed, especially through adolescent development. Human psychological and psychiatric experimental variability (or lack of consistency and stability) can be reduced and experimental comprehension can be increased by identifying within the experimental population cultivated (or lack thereof) cognitive-emotional dynamic re-processing abilities, skills, and aptitudes where emotional awareness consciously and unconsciously guides cognitive behavior towards good-feeling cognitive-emotional states of being.

25.0 Research Questions

1. How would the function of the neurological defined areas of the brain be reinterpreted if emotions have evolved as part of a conscious cognitive-emotional control mechanism where good feeling emotions regulate cognitive areas of the brain (and their activities) towards health, well-being, and success?
2. Is there an unconscious cognitive-emotional control mechanism (or adaptive information processing system (Damasio, 1999, Ledoux, 1994)) between functional areas of the brain that suppresses emotionally negative and bad-feeling cognitive behavior and enhances emotionally positive and good-feeling cognitive behavior?
3. What are the effects of pharmaceuticals designed to regulate emotional behavior and their neurological and biochemical physiology on a patient's ability to employ their conscious cognitive-emotional dynamic control system?
4. If individuals are educated and trained to develop their abilities and beliefs to consciously re-process, re-structure, and re-organize cognitive activities towards a better cognitive-emotional feeling place, will the experimental environment surrounding major depression, psychotic mania, or schizophrenia studies develop greater stability, repeatability, consistency, and understanding?
 - a. Does cognitive-emotional health education, training, and skill development increase the efficacy of psychological and pharmaceutical therapeutics?
 - b. As patients progress and develop the capacity to use their emotional feedback to regulate their cognitive and physical behavior, would a pharmaceutical therapeutic program that progressively decreases its impact allow patients to more effectively respond to their emotional awareness?

25.0 Research Questions

5. With cognitive-emotional health education and training programs in our primary and secondary educational institutions (and as part of psychological and pharmaceutical therapeutics):
 - a. What would be the measurable effects be on the rates of suicide, mental health hospitalization, hospitalizations in general, homelessness, incarceration (recidivism), and joblessness within the general population?
 - b. Is there increased effectiveness of established psychological and pharmaceutical therapies?
 - c. Are there improvements in personal physical health and well-being within a primary school population?
 - d. Are there improvements in classroom behavior?
 - e. Are there improvements in student learning?
 - f. Are there improvements in individual sports performance and a reduction in sports injuries?
 - g. Should cognitive-emotional health education be part of criminal-justice reform?
6. What cognitive-emotional states are conducive:
 - a. to (1) inspiration, (2) problem solving, and (3) imagination, and (4) memory and recall, which, in turn, improves student educational performance?
7. Does cognitive-emotional health education provide students (or patients) with a sense of agency (SoA), ownership (SoO), and self-empowerment over their world?
8. Does cognitive-emotional health education provide patients with schizophrenic tendencies a sense of agency (SoA), ownership (SoO), and self-empowerment?

25.0 Research Questions

9. Can psychotic mania be attributed to conscious or unconscious disassociation with depressive functional areas of the brain and vice versa for major depressive disorder?
10. How much of the observed neurological, biochemical, and physiological signatures of mental disorders within the body and brain can be attributed to a lack of conscious understanding and ability to self-regulate cognitive behavior (by using emotions, feelings, and moods as feedback mechanisms)?
11. Are there significant differences in the effectiveness of cognitive re-processing skills to change cognitive behavior in response to the good and bad feelings of emotions, moods, and feelings for individuals with a history of activities involving the arts and performing arts such as music, dance, and theater versus those without a history of participating in such activities?

Note: The identification of different 1) re-processing skills to regulate cognitive behavior, 2) relevant educational training curriculum, 3) measures of the effectiveness and improvement of these skills, and 4) measures of the effectiveness of various re-processing skills for different affective states within different age groups have yet to be determined.

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27.0 Revisions

1. 2020-07-01a: Release with editing from AJE
2. 2020-07-01a – 2020-08-2a: Various cover and internal formatting changes
3. 2020-08-09a: Added “Letter to Academics in Psychology, English, and Literature”
4. 2020-08-10a – 2020-06-03a: Various edits to the “Dear Academics” letter
5. 2020-09-08a: Added Appendix A: Revisions and references
6. 2020-09-10a: General editing
7. 2020-09-16a: Rewrote introductory letter
8. 2020-09-19a: Edited Figure 1: Cognitive-Emotional Process Flow Chart
9. 2020-09-24a: Added William James’s cognitive-emotional process flow chart
10. 2020-09-26a: Within cognitive-emotional process flow chart, replaced “(emotions-as-effect theory)” and added the book to the reference list
11. 2020-09-29a: Corrected reference formatting errors (, &)

12. 2020-10-01a: Revised mindfulness-based cognitive therapy for depression to second edition version (Segal, 2018)
13. 2020-10-09a: Edited typos in references; added improving EBT letter; reordered frontmatter
14. 2020-10-11a: Separated Abstract into multiple paragraphs
15. 2020-10-12a: Revised “Improving Evidence-Based Therapies Letter”
16. 2020-10-12b: Added postscript to “Improving Evidence-Based Therapies Letter”
17. 2020-10-23a: Added “Burnt-Hand Disease/Depression as a Verb” letter
18. 2020-10-23b: Edited Abstract and Synopsis (3).
19. 2020-10-23c: Corrected (Segal, et al., 2018) reference typos
20. 2020-10-28a: Modified cognitive-emotional flow chart; added emotions, moods, and feelings (EMFs) to list definition notes; differentiated EaET and with Cognitive-Emotional Education.
21. 2020-10-28b: Edited “Abstract”
22. 2020-11-01a: General editing throughout
23. 2020-11-14a: RENAMED PAPER using dysregulation instead of regulation: (*Emotions-as-effect theory: The linguistic semantics of emotional vs. cognitive dysregulation.*); edited letters and abstract and reordered opening letter sequence
24. 2020-11-17a, b: Added process flow diagrams from Gross, Beck, Segal, and Greenberger; rewrote letters
25. 2020-11-18a: Rewrote letters; changed letter order; added Wikipedia discussion of emotions; edited cognitive-emotional process flow chart
26. 2020-19a: Edited cognitive-emotional process flow chart; reordered abstract and chart; switched reference for “school to prison pipeline” from BBC to LDF, 2018
27. 2020-12-09a: In “*The greatness of the human life experience*” replaced “evolved biofeedback mechanism” with “emotion”
28. 2020-12-11a: Modified cognitive-emotional process flow chart; modified emotions-as-effect statement to include EMFs
29. 2021-02-05a: General editing; updated;replaced emotional biofeedback mechanism with cognitive-emotional biofeedback mechanism

27.0 Revisions

30. 2021-03-04a: Added letter “*The Great Debate: Emotional Dysregulation vs. Cognitive Dysregulation*”
31. 2021-03-23a, b: Added to letter “*The Great Debate*”, Warning 3
32. 2021-03-24a: Edited Warning 3
33. 2021-03-30a: Added some quotes to frontmatter
34. 2021-05-05a: Incorporated edits from AJE
35. 2021-05-06a: Reformatted entire document; eliminated letters and incorporated them into the body of the document; moved most quotes into body; developed, reordered, edited and added to “warnings”
36. 2021-05-07a: Updated Figure 5, Cognitive-Emotional Process Flow Chart; corrected some figure reference numbers; edited table of contents page numbers
37. 2021-05-14a, b: Incorporated new edits from AJE; general review
38. 2021-06-15a, b: Added Warning 6 to letter “*The Great Debate*”; added “behaviors” to Cognitive-Emotional Process Flow Chart; expanded cognitive-emotional re-processing
39. 2021-06-16a, b: Rewrote beginning paragraph of “Defining Emotion as an Effect That Accentuates Behavior”; replaced “reflexive behavior” with “self-indulgent behavior” in Cognitive-Emotional Process Flow Chart; added Section: The Cognitive-Emotional Process Flow
40. 2021-06-17a: Added “Author’s Note” to section “Cognitive-Emotional Process Flow” to help clarify the distinction between re-processed behavior and self-indulgent behavior.
41. 2021-06-18a: Removed behaviors from Process Flow Chart; Renamed chart Cognitive-Emotional Re-Processing...”; Added a “Simplified Cognitive-Emotional Re-Processing Flow Chart” to include behavior; rearranged sections; modified “Author’s Note” on self-indulgent behavior
42. 2021-06-18b: Changed reprocess to re-process; edited figure 6; added bibliography of author’s publications, cover photo description
43. 2021-06-26a, b: Modified figure 6; added entertainment mode and re-processing mode of cognitive-emotional behavior to section “Success in Education”; some sentence structure editing

44. 2021-07-02a: Added cognitive-emotional development to re-processing diagrams; edited Item 3 in Synopsis
45. 2021-07-06a: Changed from “modulate” to “re-process” cognitive activities
46. 2021-07-08a: Abstract: reworded the causal nature of emotions in human behavior by way of cognitive processing/re-processing
47. 2021-07-18a: Incorporated engineering process control theory and closed-loop process control as integral to emotions-as-effect theory; added references Palm, W. (2014) and Ogata, K. (2010); added new figure 1 and re-numbered following figures
48. 2021-07-23a, b: Added references: Marken, R.S., (2020); Powers, W.T., (2016); Mansell, W., Carey, T.A., Tai, S.J. (2013); corrected table of contents page numbering; added emotional guidance/feedback and cognitive reprocessing to abstract
49. 2021-07-29a, b: Changed title to include Emotional Control Theory; adjusted text accordingly; further clarified the linguistic semantics of “emotional control”; changed “a-ha” date to late 1993
50. 2021-08-12a: Updated simplified cognitive-emotional (re-) processing flow charts (figure 1 and figure 7)
51. 2021-08-23a: Included “psychological and pharmaceutical therapy” and “health and literary education” in the abstract; corrected spelling of health; replaced “wealth” and “prosperity” with the more general and inclusive word “success”
52. 2021-08-27a, b, c: Added “Authors’ (of all genres) failure...” to Section: Emotions as Effect Theory; added to “How long...”; also added biochemical and physiological signatures
53. 2021-09-08a, b: Added to Section: “Emotions-as-Effect and Emotional Control Theory: The Linguistic Semantics of Emotional vs. Cognitive Dysregulation” emotions are felt...
54. 2021-11-15a: Moved Figure 7: Simplified Closed-Loop Emotional Control to Figure 1 and reordered figures; added Appendix A: *Spock’s Reason vs. Emotion: A Fictitious and Dangerous Linguistic Construct of the Human Mind*
55. 2021-11-15b: Ran text through a Grammarly edit program
56. 2021-11-23a, b, c: Added to beginning four new beginning quotes, one noting CEBT; general grammar editing

27.0 Revisions

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57. 2021-11-24a, b, c, d: Re-phrased text to highlight both the effect nature of emotions as the product of a system and their causal nature when used as feedback that changes the system; corrected reference figure page numbers; removed CEBT because of contrary previous defining by other authors
58. 2021-11-26a, b: Added two more quotes to the beginning. Edited “ignorance” quote
59. 2021-11-28a, b: Edited both Simplified Cognitive Processing Charts
60. 2021-12-01a, b, c: Edited Simplified Cognitive Processing Charts
61. 2021-12-03a: changed title of applications text to” *Cognitive-Emotional Health Education....*”
62. 2021-12-16a: General editing
63. 2021-12-21a, b, c, d: Rewrote abstract; general editing to differentiate emotion’s effect and casual nature in open and closed-loop process control theory; updated Figures 1 & 2
64. 2022-01-08a: Corrected table of content page numbers; more Grammarly editing
65. 2022-01-14a, b: Reformatted “**Warning 4**”; page formatting
66. 2022-02-18a, b: Standardized “cognitive activities” to APA (2020), perceiving, conceiving, remembering, reasoning, judging, imagining, and problem-solving; added article and paper to publishing list
67. 2022-02-23a: Added section “Cognitive-Emotional Gymnasium”; numbered sections
68. 2022-02-28a: Inserted Brown, LeDoux, & Pine theory of separate brain (cortex) and body (amygdala) circuits of emotions; rephrased “biochemical...” to include “neurological”
69. 2022-03-06a: Added “Preface”; rewrote “research questions” section; interjected three faces of a coin analogy; updated LeDoux and Associates’ “two-system framework”
70. 2022-03-11a, b: General editing and re-phrasing; removed unnecessary references to emotional control theory paper; Removed “Spock’s Article” to its own publication; edited process flow diagrams
71. 2022-03-18a: Edited back cover blurb; updated diagrams
72. 2022-03-25a: Added Section 2.0 Significant Knowing and Awareness: “But it’s a talking dog!”; added Figure 1: Fly-Ball Centrifugal Governor and Figure 2: Emotional Event Internal Process Flow; edited Figures 3 & 4; adjusted numbering accordingly

27.0 Revisions

- 73. 2022-03-25b: Reordered “Preface” to the beginning.
- 74. 2022-04-04a, b: Added section: “Factorial Analysis of Basketball Shooting Success: An Experimental Design and Validity Analogy”; edited the section
- 75. 2022-05-21a: Delineated human (vs. animalistic) cognitive-emotional dynamics; standardized figure descriptions
- 76. 2022-05-23a: Cleaned up some logic in the process flow diagrams
- 77. 2022-05-26a: edited Figure 3: Human (vs. Animalistic) Closed-Loop Cognitive-Emotional Re-Processing

The greatness of the human life experience emerges from the flames of individual desire arising out of hell's fiery conflicts on earth. Intention is forged in these fires. Emotion aligns our journey with these new intentions. Each succeeding generation will have its own mountains to climb and waters to cross with its own stars to navigate towards. Intent is that guiding star, and our emotions perceive its light. The more joyous the feeling, the more harmonious and powerful the wonders revealed through life's journey.



Andrew O. Jackson suffered from psychotic mania, suicidal depression, and schizophrenic tendencies. He was in and out of mental hospitals from 1979 to 1996. Once after another “blackout” period, he “awoke” in a mental ward and wondered how he got there this time. The nurse said he went up to a police car and told them that his friend needed help. His “friend” was a trash can. Another time he “awoke” with a rope in his hand ready to put an end to this torturous life when a voice asked him, “Can you go on?” “They” wanted him to continue this existence a while longer. He replied, “Yes” and got himself to a hospital.

Around 1993, in a moment of inspiration that has now led to his cognitive-emotional re-processing paper, he began a self-directed healing program using his emotions as feedback for his biochemical, neurological, and physiological state of being. After a couple more psychotic episodes (one that landed him in the El Paso County jail and led to a divorce from his first wife) and after seventeen years of therapists, psychologists, and psychiatrists, he no longer needed the benefits of their assistance. He has been medication-free and without disassociation, depression, or mania episodes since 1996.

Since 2005, he has been writing to academics around the world advancing a new emotional paradigm that defines cognition as causal to and emotions as an effect of biochemical, neurological, and physiological states of being. Emotions, instead of being regulated by cognitive behavior as current psychological academia prescribes, have evolved into a cognitive-emotional control mechanism to guide cognitive behavior towards the health, well-being, and prosperity of the individual.

He has an MS in Technology Education and an MS in Management Technology from the University of Wisconsin – Stout. He was a high school shop teacher, a college CAD (computer-aided design) instructor, a guest instructor in China teaching quality and inventory management, and a quality manager at an OEM (original equipment manufacturer). He is now happily married and retired from mechanical engineering, spending his summers sailboat racing and winters alpine skiing with his wife Barbie and their two cats.