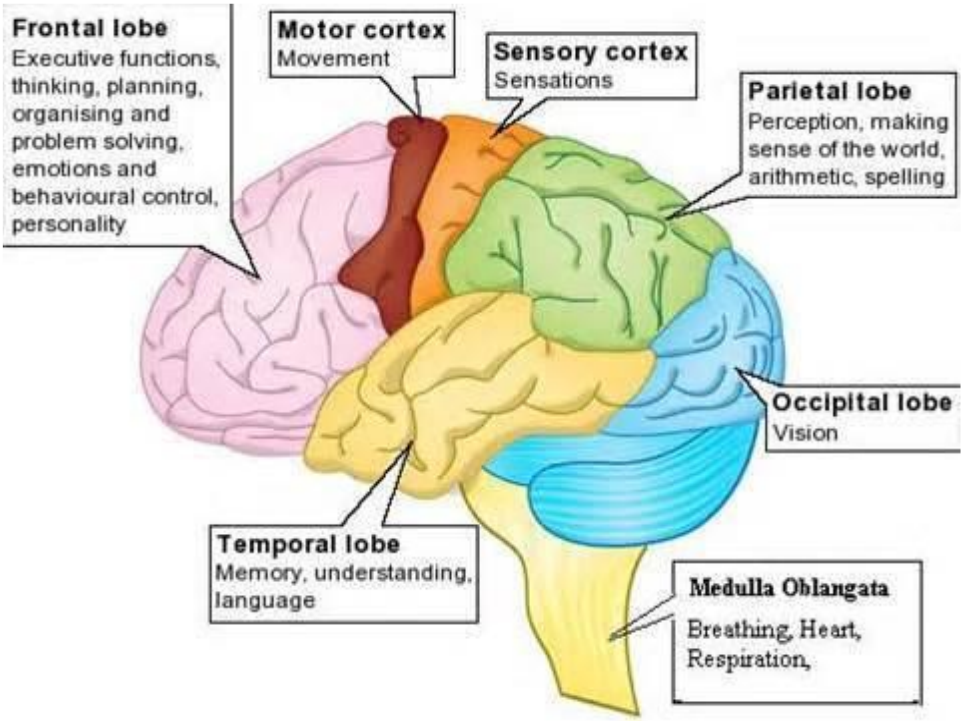
From Mind Matters by Robert Jerus

EIQ: Understanding the Brain

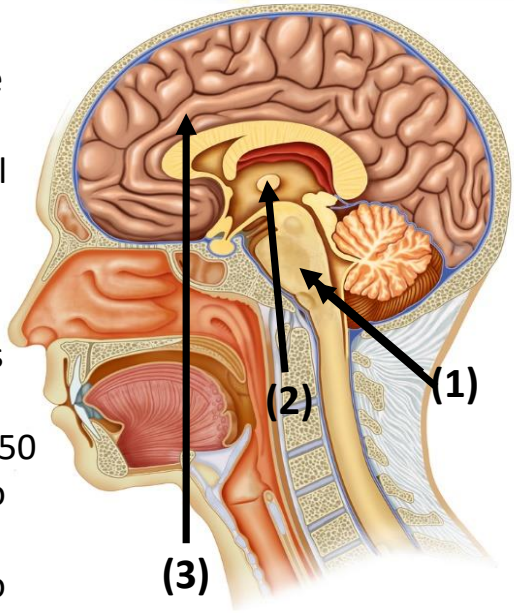
The brain has a wide variety of functional areas. Each is linked to a variety of functions. Three basic areas can be seen to direct performance, social interaction and the quality of results. The Brain stem and base are the reptilian brain. These serve automatic, instinctive reactions and functions. The limbic system is responsible for emotions and feelings. The brain's cortex relates highly to reason and thought.



TRIUNE BRAIN

Formation of the Cerebral Cortex According to Paul MacLean (1969)

1) Reptilian brain; 450 Million Years Ago
2) Limbic System; 150 Million Years Ago
3) Neocortex; 1 Million Years Ago



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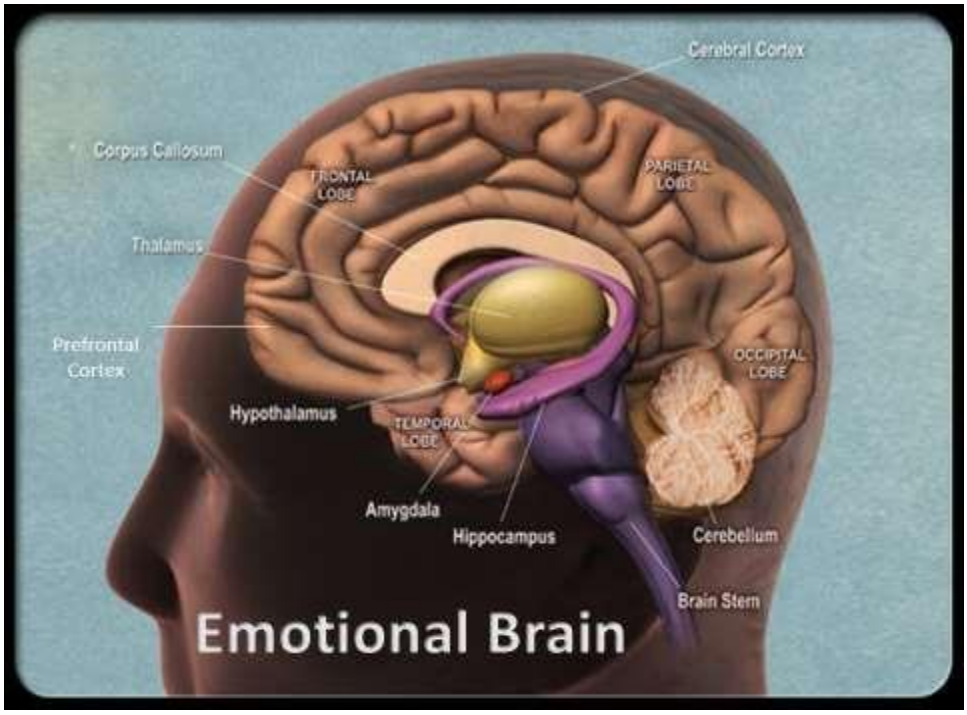


The brain takes information in through the senses and uses it to create responses to both internal and external stimuli. Physiological and chemical responses create adaptation to emotional data.

Emotional data is processed extremely quickly. Understanding the brain and how things connect allows for emotional response rather than just reaction. Brain function supports and sustains feelings. Short term reactions become moods and temperaments. In turn, these generate patterns and personalities. Managing emotions creates intentional mindsets that contribute to achievement. Emotions are made for effective adaptation and survival. They frame relationships. People have similar physiological experiences of feelings. Many emotions are brief and automatic.

Some key brain areas and their functions:

- **The Limbic System:** the seat of emotions, memory, motivation and behavior; the different parts: amygdala, hippocampus and hypothalamus are where the subcortical structures meet the cerebral cortex
- **Amygdala:** has a primary and immediate role in processing emotions and memories; responsible for emotional conditioning, learning and patterns; seat of fight/flight response; commands attention and focus; handles social processing
- **Hippocampus:** builds new memories and feelings into long-term ones; integrates emotions
- **Basal ganglia:** a set of subcortical structures that directs intentional movements

- **Prefrontal Cortex:** has been associated with planning complex cognitive behavior, personality expression, decision making, and moderating social behavior. It is also the center for judgment, impulse control and social behavior. The basic activity of this brain region is considered to be orchestration of thoughts and actions in accordance with internal goals**:**
    - Personality expression
    - Projecting consequences
    - Emotional regulation and balance
    - Attuning communication
    - Moral awareness
    - Empathy
    - Moderating social behavior
      Working memory
    - Inhibition of inappropriate thoughts/behaviors (impulse control)
    - Perception & predisposition
    - Response flexibility
    - Fear moderation
    - Insight and intuition

When dealing with people remember you are not dealing with creatures of logic, but with creatures of emotion, creatures bristling with prejudice, and motivated by pride and vanity.
~Dale Carnegie~

- **The temporal lobe:** serves as the center of memories.
- **The senses:** although not part of the brain, sight, smell, hearing, touch, and taste form the sensory impact that have a profound impact on perception, processing,

There are approximately 1.1 trillion cells and 100 billion neurons in the average human brain. There are 100,000 miles of blood vessels in the brain.
and application of emotional information.

Even though we say the amygdala regulates danger, the cerebellum motor control, and the limbic system emotions etc., this is somewhat misleading as no part operates independently and all need other parts of the brain to get their job done.

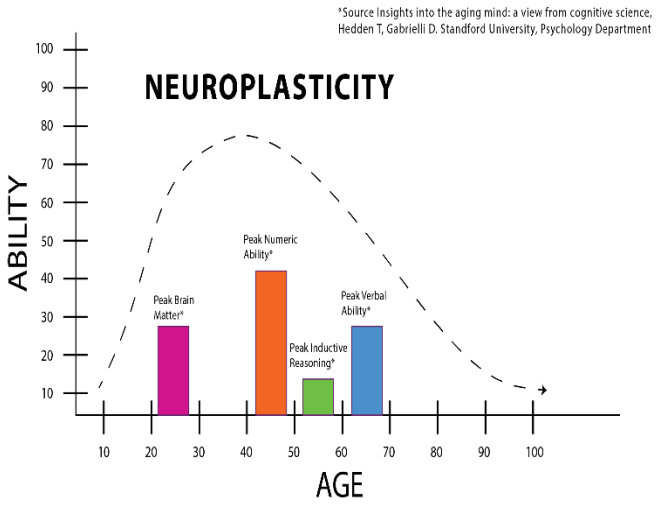
The brain is an emotional organ that converts stimuli to feelings. It functions as an integrated whole that interfaces both reason and emotion. Emotions represent meaningful information that provide for adaptation, effective performance and necessary social interaction.

Understanding the chemical and neural functioning of the brain heightens the awareness of personal management, creating effective neural patterns, and regulating performance for success.

From Mind Matters by Robert Jerus

Neuroplasticity

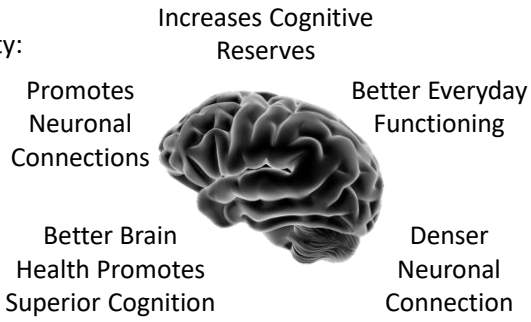
Neuroplasticity research shows that the brain changes its very structure with each different activity it performs, perfecting its circuits so it is better suited to the task at hand. By taking command of the mind and its functions, neuroplasticity becomes a marvelous tool for continuing learning, growth and new adventures on the journey of life.



Positive Neuroplasticity

Examples of promoting positive neuroplasticity:

- Mental Stimulation
- Intellectual Pursuits
- Social Interaction
- Good Emotional Health
- Physical Exercise
- Proper Nutrition & Diet
- Proper Sleep/Rest
- Therapy

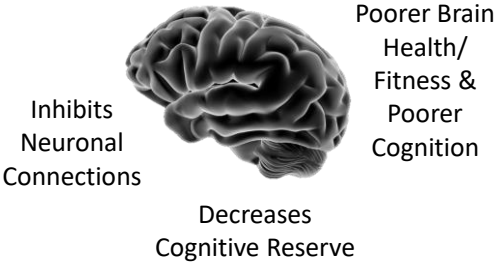


Positive Neuroplasticity Leads to Superior Fitness/Wellness & Performance

Negative Neuroplasticity

Examples of promoting negative neuroplasticity:

- Nonstimulating Activities
- Social Isolation
- Poor Emotional Health/Fitness
- Sedentary Lifestyle
- Inadequate Nutrition
- Inadequate Sleep
- Substance Abuse
- Lack of Challenges



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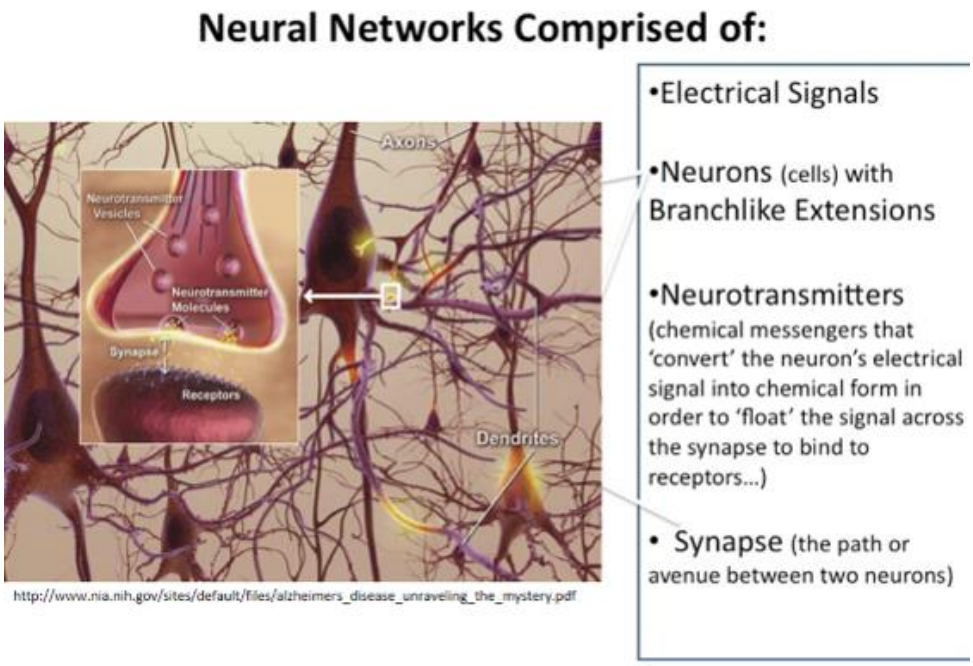
The Neural Network

Conscious awareness and unconscious processing occur at different speeds, often simultaneously. Nerve impulses to and from the brain travel as fast as 250 miles per hour. Each neuron is connected to other neurons by up to 40,000 synapses. Multiplying 85-100 billion neurons by 40,000 is the equivalent of the brain having more connections than there are stars in the universe.

Neural networks are continuously modified and repaired.

Your brain makes space to build new and stronger connections so you can learn more. There's an old saying in neuroscience: "neurons that fire together wire together." "Glial cells" are the gardeners of your brain—they act to speed up signals between certain neurons. But other glial cells are the waste removers, pulling up weeds, killing pests, raking up dead leaves. Your brain's pruning gardeners are called "microglial cells." They prune your synaptic connections. Your brain cleans itself out when you sleep! What you focus on prevails! You literally craft your own mind by choosing what you pay attention towards.



http://www.nia.nih.gov/sites/default/files/alzheimers_disease_unraveling_the_mystery.pdf

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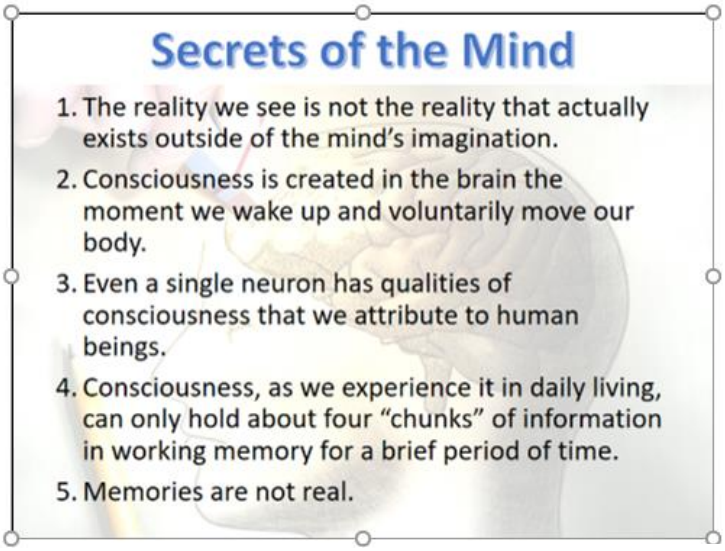

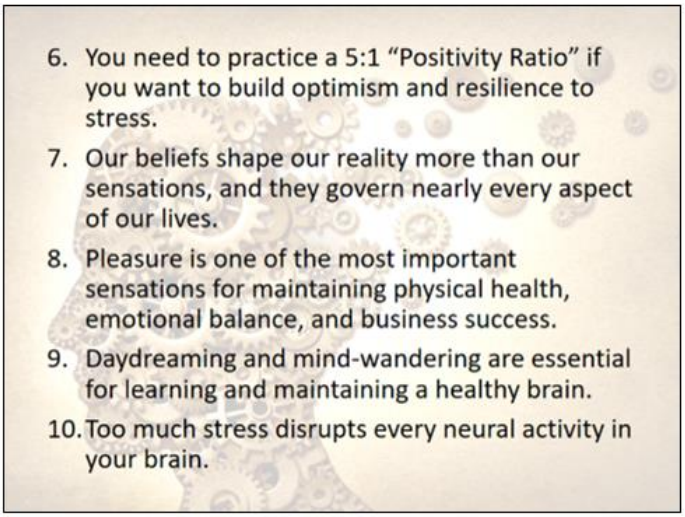

Secrets of the Mind

1. The reality we see is not the reality that actually exists outside of the mind's imagination. It's a fundamental neurological fact: our senses collect information about the outside world and the brain processes it in ways to enhance our survival.

2. Consciousness is created in the brain the moment we wake up and voluntarily move our body. For decades, behaviorists didn't want to deal with the mind or the notion of consciousness, but we now know that dopamine – a pleasure chemical – gets released from the motivational center located deep in our ancient brain. The chemical stimulates tiny areas in our frontal lobe – right above our eyes – which makes us aware of the outside world.

3. Even a single neuron has qualities of consciousness that we attribute to human beings. Eric Kandel won the Nobel Prize for showing that a nerve cell from a sea slug can be trained to become more curious about the environment. When this happens, it grows new axons and dendrites from the neuron's body, allowing it to send and receive more information to other neighboring cells.
   A single neuron can learn and store that information into memory, and it can also be traumatized, causing it to retract its dendrites and axons as it becomes more fearful about the world. Here, in a single neuron, we can begin to understand the nature of motivation and anxiety.
4. Consciousness, as we experience it in daily living, can only hold about four "chunks" of Information in working memory for a brief period of time. We have the illusion that we are

conscious of hundreds of things at one time: colors, things moving around us, awareness of what we are striving to achieve, etc. However, we can only be aware of a tiny bit of Information at a time. A single word is a "chunk" of information, and it's almost impossible to remember any sentence that has more than 7-10 words.

5. Memories are not real. This may seem obvious, but when we're dealing with negative emotions, fears, worries, and doubts, it's essential to remember that the feeling has less to do with the present moment than we may think. Memories are very inaccurate, and each time they are recalled they are slightly changed. Autobiographical memories are particularly prone to distortion.

6. You need to practice a 5:1 "Positivity Ratio" if you want to build optimism and resilience to stress. This profoundly important discovery put the field of Positive Psychology on the map. Neurologically, your right prefrontal cortex constantly generates a stream of negative thoughts and feelings. Your left prefrontal lobe is more optimistic and is designed to make decisions that improve your success at achieving goals you desire. Since consciousness is limited, you have a choice: you can ruminate on negativity or focus on solution-based goals, but you can't do both at the same time. If the ratio of positive thoughts to negative thoughts falls below 3:1, those are the relationships and businesses most likely to fail.

7. Our beliefs shape our reality more than our sensations, and they govern nearly every aspect of our lives. Our memories form the basis of habitual behavior and they also form the foundation of our belief systems. A belief is a thought process – an assessment of the world and the value we place on a behavior or ideal. The more we repeat a certain thought, the more "real" that thought becomes. Because everything we believe in also has a corresponding non-belief, the brain does something odd. It rejects any information, or anyone, that interferes with that belief.

8. Pleasure is one of the most important sensations for maintaining physical health, emotional balance, and business success. Stroking one's palms can eliminate performance anxiety, slowly brushing one's arms decreases negative emotions, and engaging in pleasant physical activity improves work productivity. Pleasure releases dopamine, and dopamine motivates us to work harder, and all you have to do is to slowly stretch your arms, neck and torso two or three times an hour for 10 seconds.

9. Daydreaming and mind-wandering are essential for learning and maintaining a healthy brain. Consciousness involves a highly focused and concentrated form of attention, but the neurochemicals involved in hard work are quickly expended. If you take a couple of "daydreaming" breaks each hour – just closing your eyes and letting your thoughts and feelings wander to wherever they want to go – you'll feel completely refreshed after a minute or two.

10. Too much stress disrupts every neural activity in your brain. It can come from intense concentration, worrying, or procrastination. If you combine yawning with slow stretching and gentle stroking of your arms and hands, you'll enter a very deep state of relaxation in 60 seconds or less.

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Chemicals of the Brain

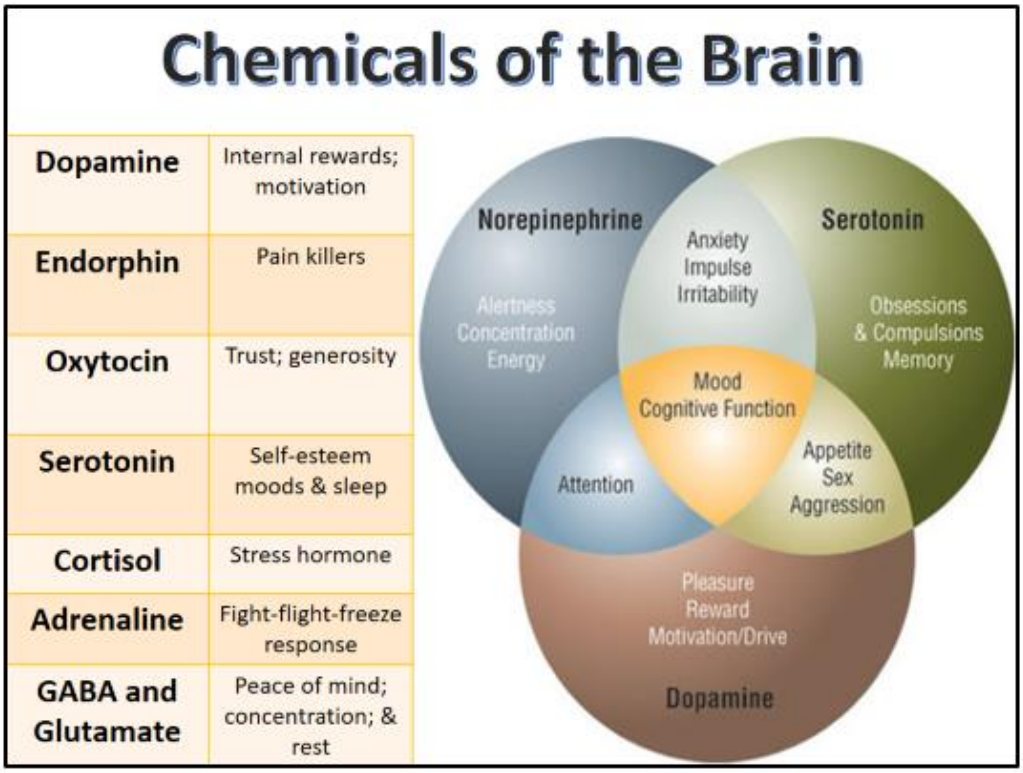
Information and feelings are transmitted through neurons in the brain. These transmissions are created through electric and chemical transmissions.

Dopamine is the pleasure high, the fireworks, our reward. Dopamine is one of the most fundamental neurotransmitters we have. Basically we are dopamine machines. *The expectation of dopamine drives our mind to control our body to do things*.

Serotonin is serenity, ecstasy, and the state of grace. It is the lingering pleasure sensation we get that is less intense than dopamine, but nonetheless a *powerful driver for our behaviors*. Serotonin is about feeling good, really good.

Oxytocin is the bonding agent, the cuddle chemical. *This bonding agent makes us want to connect, physically, with another person. And once connected, stay connected.* It is a powerful force!

Vasopressin is a male neuro-hormone, the protection drug, one that kicks in to *support feelings of possession and desire* to thwart anyone else taking possession.



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The Brain's Executive Functions

Regarded as a developmental theory, coaching and support empowers the functions to be developed faster and stronger.

Dr. Thomas Brown Cycle:

Activation: organizing; prioritizing; energizing>>>>>

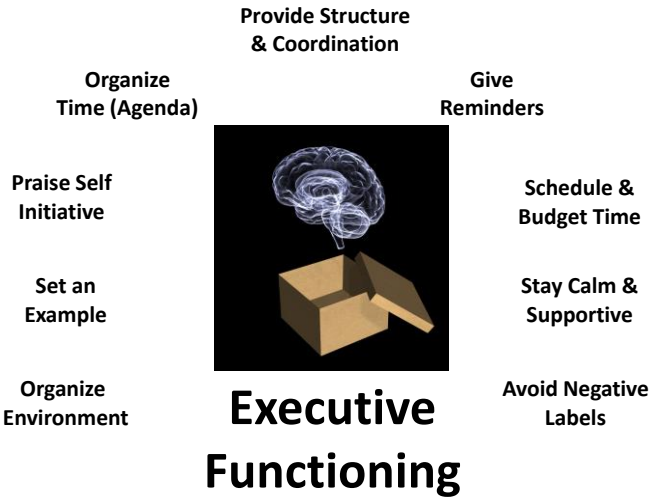
Performance: action; self-monitoring>>>>>

Memory: storage; recall; establishing cause and effect>>>>>

Emotions: understanding, awareness, managing>>>>>

Effort: regulating intensity>>>>>

Focus: Intensity; concentration; attention>>>>>



- Time management
- Organization
- Prioritizing
- Problem solving
- Estimating outcomes
- Analyzing sensory information
- Anticipating consequences
- Evaluating possible outcomes
- Choosing actions based on positive outcomes
- Choosing based on social expectations and norms
- Performing tasks required to carry out decisions
- Planning and completing projects
- Struggling with telling stories in the right sequence
- Retaining information in distracting situations
- Initiating tasks and generating ideas independently
- Impulse control/appropriate inhibition
- Emotional understanding and regulation
- Flexible thinking; creativity, agility, versatility, adaptability
- Self-monitoring/self-awareness
- Planning, prioritizing, execution and control
- Initiative/drive/motivation
- Organization and coordination

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The brain is responsible for both thoughts and feelings. It is the primary seat for both reason and emotions. Mastering the mind begins with acknowledging that both emotional and logical information needs to be continuously processed, analyzed and acted upon. Success comes through a mind-heart connection. Failing to recognize either feelings or thoughts as valid creates a distorted picture of reality and generates an inadequate, ineffective response to life.

Through life, the brain continuously develops and changes. It is transformed by experience, learning, memory and routing of a wide array of information. These adjustments, collectively termed neuroplasticity, shift chemical and electric patterns as well as the physiology of the brain.

Success is a journey rather than a destination. It requires mastery of the mind and continuous programming for success. Since the brain is always changing, habits become ingrained and establish new set neural pathways. 'Stinking thinking' occurs when these are counterproductive. When the brain is actively engineered for success, patterns that lead to peak performance and achievement are deliberately established and retained. Winning is an active, continuous choice. Champions intentionally choose excellence. Luck happens as preparation and ability meet opportunities.

Thoughts and feelings lead to performance. They also serve as the foundations for relationships and ongoing connection. Close supportive relationships stimulate positive

emotions, neuroplasticity, and learning (in turn, these form a complete cycle that supports relationships).

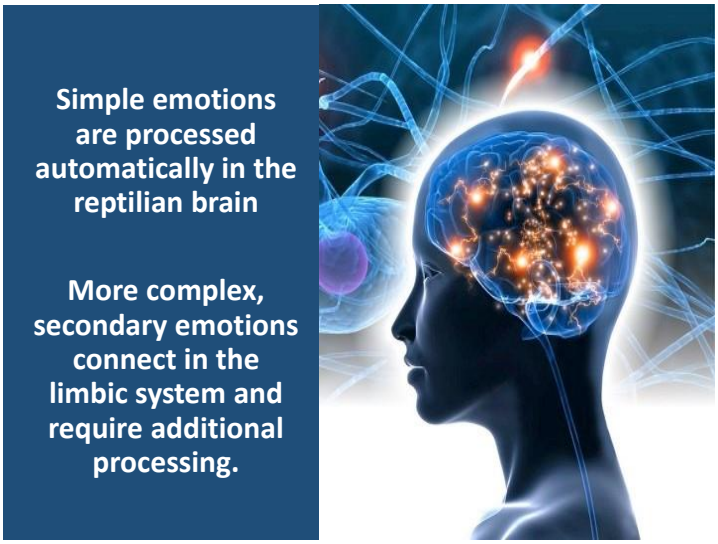
Understanding how the mind and brain connect forms the psychology of winning. Some key essentials:

- The brain is a social organ. Our brains require stimulation and connection to survive and thrive.
- The brain's wiring emphatically relies on emotion over intellect in decision-making.
- Emotions are neither good nor bad. They are feelings that provide information that is either helpful or counter-productive.
- Conscious awareness and unconscious processing occur at different speeds, often simultaneously. Nerve impulses to and from the brain travel as fast as 250 miles per hour.
- The mind, brain, and body are interwoven. The brain consumes approximately 20 to 25 percent of all energy. The brain has between 50,000 and 70,000 thoughts per day.
- The brain has a short attention span and needs repetition and multiple-channel processing for deeper learning to occur.
- Fear and stress impair learning. There are no pain receptors in the brain, so the brain can feel no pain.
- We tend to analyze others but not ourselves.
- Emotional responses are much quicker than rational ones. It takes around six seconds for those molecules of emotion to get absorbed back into your body after you've had a reaction.
- Some emotions support action and energy while others are passive.
- Emotions have distinctive physiology.
- Emotions can only be experienced one at a time.
- Feelings are always experienced in the present tense.
- Facial expressions can and do influence emotions.
- Overall productivity and quality of life improve with constructive emotions.
- Relationships improve with appropriate emotional exchange.
- Emotions are leading indicators of either success or failure.
- Positive emotions can increase the brain's ability to make good decisions; broaden attention and thinking; overcome negative feelings; fuel psychological resilience; build endurance and tenacity.
- The brain is creatively performing 400 billion actions at any moment – individuals are only conscious of about 2,000 of them.
- The National Science Foundation estimates that a human brain produces as many as 12,000 to 50,000 thoughts per day, depending on how deep a thinker a person

is. Most of the so-called random daily thoughts are about our social environment and ourselves.

- Negative feelings are connected to poor health and illness. Poor health and a lack of wellness supports negative emotions.
- The brain is subject to change and development independent of both genetics and age. Brain 'fitness' comes from active interaction and application. The brain never loses the ability to learn and change because it's effectively plastic and constantly rewiring itself.
- 50-70% of doctor visits can be traced to psychological reasons.
- The mind has a finite amount of will power each day because to exercise will power requires energy in the form of oxygen and glucose. That's why people find it harder to say 'no' when tired or not feeling themselves.
- Reframing negative events in a positive light literally rewires the brain and can make an individual a happier person, as can regular meditation.
- Each neuron is connected to other neurons by up to 40,000 synapses. Multiplying 85-100 billion neurons by 40,000 is the equivalent of the brain having more connections than there are stars in the universe.
- The brain continues to develop and change from birth until death.
- It takes our brains 80 milliseconds to process information. That means we are all living ever so slightly in the past.
- Information in the brain travels at about 268 miles per hour.

The brain is a learning, performance system. It constantly adds and refines information. With data continuously flowing, the mind is always rebuilding and reforming.



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Brain Based Learning

Keeping the brain engaged; learning by doing

- The brain performs many tasks simultaneously
- The brain is adaptive and social
- Learning engages the whole brain
- The search for meaning is innate
- The brain processes and learns in patterns
- Emotions are essential in pattern development
- Brain chemistry affects behavior
- Wholes and parts are processed simultaneously
- Learning involves focused attention and peripheral perception (engaging multiple modes enhances: music; games; visualization/imagery; writing; movement; story telling;…)
- Learning takes place consciously and subconsciously
- Memory is spatial (episodic) and rote
- Facts and images are understood best in context when imbedded in spatial memory
- Learning is enhanced by challenge and inhibited by threat
- Every brain is uniquely organized; it changes based on experience
- Complex, challenging experiences with feedback are best for developing new connections

Caines Brain/Mind Learning Principles

Getting Smarter

- When you practice deeply, intentionally, and with some element struggle a neural pathway is formed.
- Repeated firing with deep practice and either struggle or ecstasy, alerts oligodendrocytes and astrocytes that this pathway needs to be upgraded, or insulated, and the process of myelination begins.
- The pathway (grey matter) is strengthened via the myelin (white matter) insulation.
- The brain will choose the most highly myelinated pathways (because clearly they are the most important).
- Anxiety removal; managed emotions; enhanced creativity.
    - Persevere through the uncomfortable part of learning
    - Do it repeatedly in intense (and short is ok) bursts.
    - See, hear, feel yourself doing the new behavior. Really get into it. Feel the good feelings, be totally in that desired state.
- Our brains do not have the capacity to multitask.
- Learning that is spread out over time drastically increases knowledge retention.
- Multimedia tools improve our brain's memory power.
- Our brains work best at certain times of the day.

- Game play helps to exercise (and motivate) our mental muscles.
- Our brain prefers images over text.

Your Marvelous Mind

- Eyes and ears sense but the mind perceives
- Consciousness is a state of awareness and energy
- Subliminal information impacts the subconscious
- The mind is continually renewing and reinventing itself
- Emotions are always in the present tense
- Conflict, disorder, and incompleteness are uncomfortable for the mind
- Like fingerprints, all brains are different
- Memories are not real
- Positive thoughts build resilience and health
- Beliefs shape reality more than objective data
- Stress and negativity has an adverse impact on the functioning of the brain
- The brain chooses what to pay attention to and what to ignore
- Happiness and positive emotions support brain health
- The brain is curious; it thrives on information, activity, and understanding

Brain Vitality

- Be active: exercise, tackle problems, read…
- Rest, relax and renew: sleep, meditate, refresh
- Watch your diet: proper foods, nutrition and vitamins are a must
- Be curious: continuously nurture learn and improve
- Adapt and change: flexibility, agility, versatility and transformation reinvigorate
- Keep positive: maintain optimism, be grateful, forgive…. (avoid negative thinking)
- Have relationships: be empathetic, connect
- Explore people possibilities: network, stay engaged
- Be self-aware: manage your emotions and mind; take time for yourself
- Pursue projects: always have a purpose, mission and agenda

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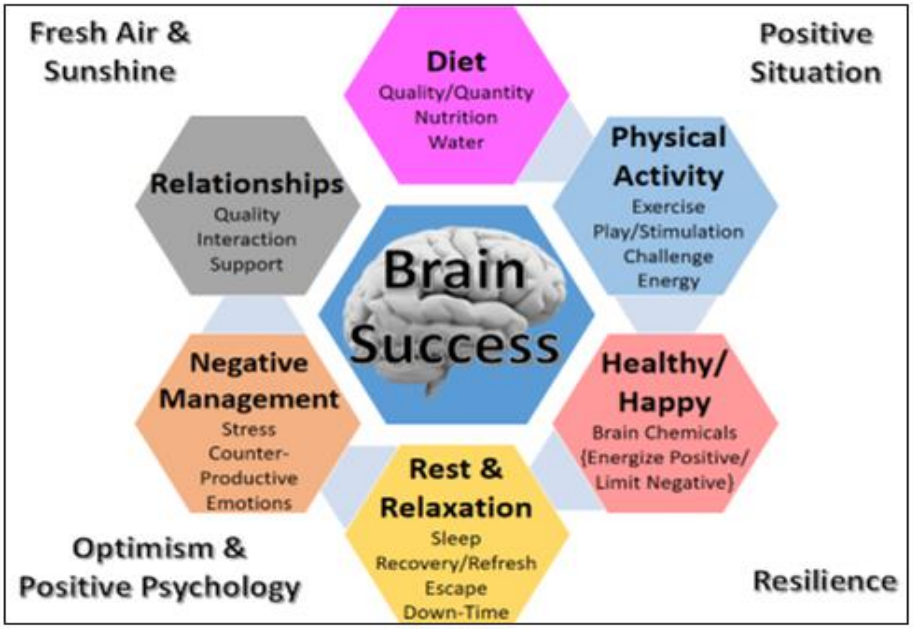
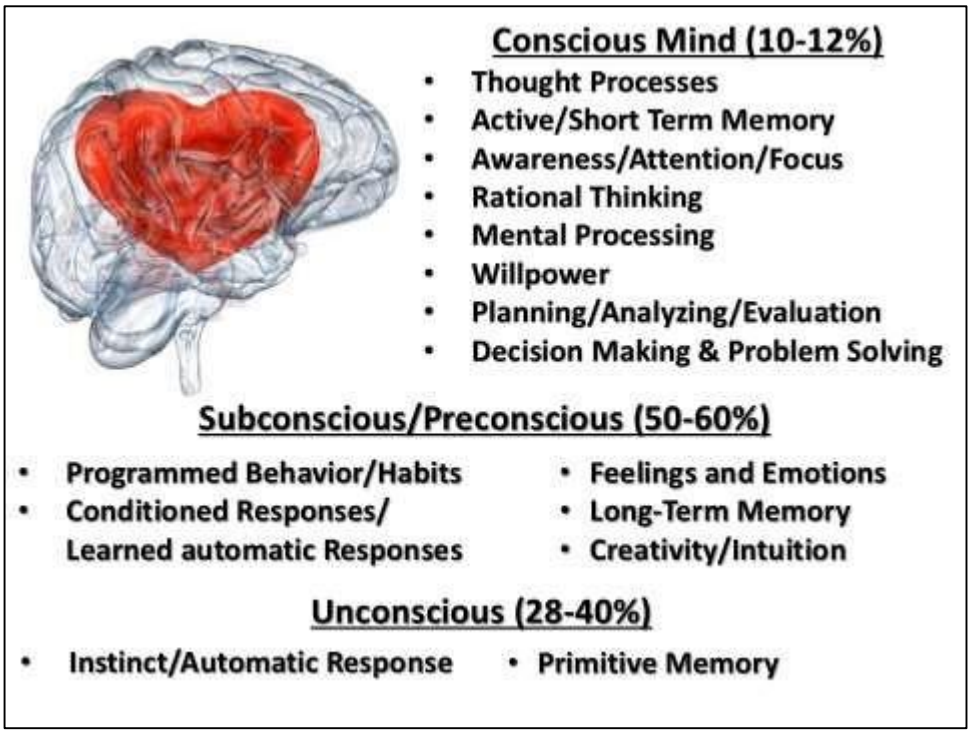


Exercise, nutrition, diet and attention allow for the mind to renew and excel. Proper conditioning refines processes and allows the development of superior achievement. Brain wellness is as important as any other part of health.

Conscious and Unconscious Mind



Consciousness is active mental awareness. It sets the level of self and social awareness. Most models of awareness begin with internal, subconscious knowledge. These states are related to mental reflection but not to active application of the senses. These levels begin with Delta sleep (deep dreamless sleep); continue to Theta (deep relaxation), and Alpha (calm, relaxed, non-focused thought); and move to Beta (active awareness, alert consciousness). The Theta and Alpha states are trance-like and highly suggestible. Richard Bartlett proposed that consciousness is a progressive awareness that moves from survival to relationship to self-esteem to transformation to internal cohesion to making a difference and finally to service.

For self and social awareness, consciousness is passive and moves towards active. At the lower levels, self-awareness is rudimentary. It is formed by programmed/learned patterns for social interaction. It provides the foundation for thought, imagination, creativity, conflict resolution and relationships. At the higher levels, it allows internal reflection, self-esteem, confidence, empathy, and the core of relationships. Subconscious may be dubbed preconscious. It is a transition (or potential transition) to active thought and consciousness.

Awareness and active application are powerful tools. At any given time, there are a myriad of unconscious and subconscious mental activities. When the mind becomes self-aware and engaged, higher levels of emotional intelligence and connectivity allow

for super performance and results. The conscious mind is intentional and deliberate. The subconscious proceeds without specific instruction.

Higher levels of performance, emotional intelligence and relationships come through constructive integration of both the conscious and subconscious. The subconscious supports action at the conscious level. It works continuously without deliberate intervention. By creating programming and patterns, the subconscious is subject to adjustment and 'focusing'. Affirmations, visualizations, self-talk and a wide array of tools serve to condition the activity of the subconscious. Relaxation, meditation, and hypnosis can tap into the memories and power of the subconscious to channel activities to targeted results.

The mind begins with unconscious incompetence. It does not know or understand information/knowledge it has not experienced. This stage shifts forward to conscious incompetence. At this level, the search for information and improvement begins. This is about exploration and discovery. Learning takes place and the mind advances. At conscious competence, there is an active awareness of performance. Strategic and tactical decisions are made to perform with a level of quality. Peak performers transfer this wisdom to the subconscious. They become unconsciously competent. They have been conditioned and programmed to achieve. Success appears almost effortless. Actions are based on second nature and accomplished with a high level of excellence.

Both the conscious and subconscious are subject to heart and mind processing. Creating an awareness of processes and goals attunes both parts to direct continuous attention towards performance and results.

To use the subconscious, the stage needs to be set to generate intentional focus. Visualization, neuro- linguistic programming, hypnosis, self-talk, affirmations, meditation and active direction set the tone for subconscious processing and create both paths and focus. Conscious thoughts and emotions are seeds for the subconscious.

The Conscious Mind: Comprises 17% of Brain Mass but it only controls 2-4% of your perceptions and behavior.

- Looks for Patterns and Objects that are Familiar Interestingly, the conscious mind also rejects patterns and objects that aren't familiar.
- Is Where Your Free Will Lives This is the part of you that thinks and reasons, and it is also the part of you that will decide what kind of changes you need to make in order to live the type of life you want to experience.
- Determines Your Results The thoughts you choose and impress from your conscious mind to your subconscious will determine where you go and what you do.

The Subconscious Mind: Is 5/6 of Your Brain Mass. Further, it controls 96-98% of your perceptions and behaviors.

- Averages 400 Billion Operations Per Second
- Is Non-Verbal Your subconscious mind sees in pictures and patterns, which is why creating a vision board and regularly contemplating it is such a great idea. Your subconscious mind actually believes as totally true every picture or image you send it.
- Doesn't Know Truth from Fiction This part of your brain doesn't know the difference between an apple and a picture of an apple–or, for that matter, between reality and imagination.
- Directs Sensory Input Your subconscious brain has to complete so many operations per second because it is constantly assessing sensory input and deciding what to do with information.
- Is Re-Trainable: If you have negative patterns of thinking, bad habits you want to change or an inability to move forwards in achieving your goals and dreams for your calmness of spirit, financial abundance, or loving relationships, you can change that via a program of brain re-training. Once an idea is chosen and consistently impressed and emotionalized into the non-conscious mind, perceptions and behaviors change to find and produce the desired result.
- The Subconscious Mind makes up 88% of your brain's capacity.
- The Subconscious Mind is unable to reason, therefore is unable to reject anything that it is told by you the 'conscious mind' in essence - so be careful what you think!
- The Subconscious Mind has a perfect memory which means we only need search and have faith in its ability and we'll recall information easily.

Whether you think you can or think you can't, - you're right.

~Henry Ford~

Exercise Positive Psychology and the Law of Attraction

What the mind concentrates on and gives its attention to tends to dominate life. Worry, anxiety and regret lead the way to negative thoughts and feelings. Concentrating on failure and disappointment paves the way for their dominance.

Positive psychology taps the tools of affirmation, visualization, neuro-linguistic programming and the Law of Attraction to focus both the conscious and subconscious mind. When internal communication and awareness are attuned to constructive thoughts and emotions, they reinforce it though the senses of the mind. Seemingly, they attract positive outcomes. Conversely, a focus or emphasis on negatives is likely to become a self-fulfilling prophesy that generates disastrous outcomes.

Actions and communications, predicated on positive thoughts, emotions and faith generate constructive, successful results.

Habits of either positive or negative emotions create enduring patterns. They tend to continue without any particular cause. These generate a set point. About 50% of happiness is determined by the predisposition of the set point. Circumstances translate to about 10% of overall well-being. These are based on luck, health, and a wide assortment of

variables that, at the particular time, are already established. The overwhelming 40% are based on intentional activities. The final 40% is ultimately a choice. When happiness choices are effective, they nurture and cultivate positive emotions. These adjust the set point and have a long-term influence on circumstances.

Happiness is based on:

- **The Pleasant Life** (life of enjoyment). This describes how people optimally experience and savor the positive feelings and positive emotions in their past, present and future (for example, with optimism, hope, forgiveness, gratitude, relationships, hobbies, and interests).
- **The Good Life** (life of engagement). This considers the beneficial effects of immersion, absorption, and flow that individuals experience when optimally engaged in activities. These states are experienced when there is a positive match between people's strengths and the challenges of the tasks they are doing, i.e. when they feel confident that they can accomplish the tasks they face.
- **The Meaningful Life** (life of affiliation). This examines how individuals derive a positive sense of well-being, belonging, meaning, and purpose from being part of and contributing to something larger and more permanent than themselves (for example through exploring values and alignment, post traumatic growth, participation in social groups and organizations, and volunteerism).

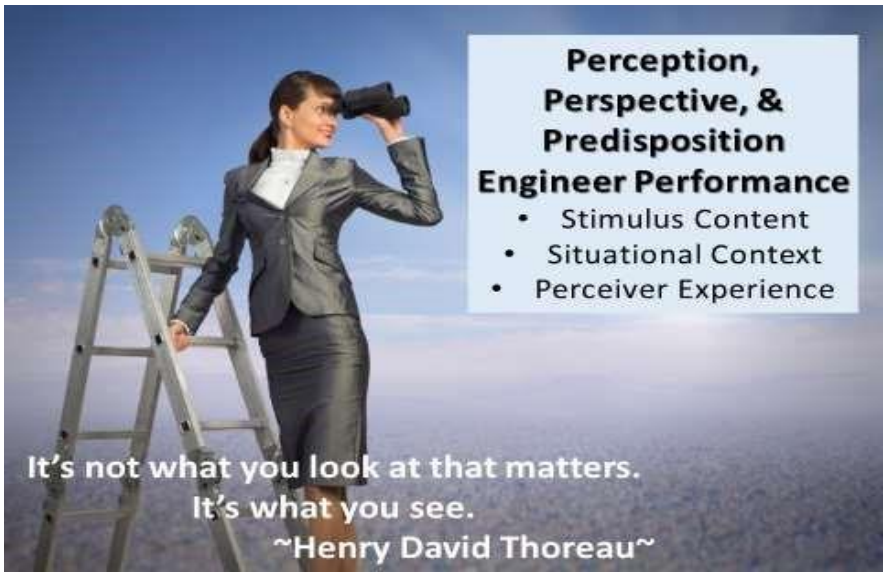
Intrapersonal awareness and management set the course for performance. High performance is supported by positive beliefs and a focused path. Self-regulation sees achievement and success in the future. It directs thoughts, feelings and actions to accomplish a predesigned mission.

Internal repetition and focus teach optimism and positive expectancy. It creates positive mental programming. This looks for the good in life and reasons to rejoice. This mindset cultivates potential and sees powerful, fulfilling possibilities. By attuning thoughts and feelings constructively, they become self-fulfilling prophesies. Positive psychology increases success and makes the journey far more fun. Positive answers: participation in life; quality relationships; social competence; forgiveness and inner peace; gratitude; hope; and optimism increase the positives in life and lower the negatives. Being happy creates more reasons to be happy and positive. The natural extensions of a positive intrapersonal mindset are to project it externally and see the best in others and the world. These too tend to conform to expectations and support high achievement.

Happiness is an active choice. It becomes a reality as thoughts, emotions and actions direct a concerted effort. Happiness is a complex emotion that derives its strength from relationships, experiences, choices, focus, point of view and behavior. When the habit becomes learned and sustained, happiness becomes the normal pattern of the mind.

Channel Predisposition, Perspective and Perception

Predispositions and perceptions color the world. They are subject to the information supplied by the senses as well as the decoding by the mind. Thought and feeling continuously adjust and frame the outside world. Perceptual distortion creates wrong assessments of external realities.



No one has the time or inclination to process and decode all the information available. The process begins with perceptual selection. The mind selects and dwells on particular stimuli. Understanding is based on the decoder/receiver: experience, memories, stimuli, context, learning, attention and awareness are focused on a limited number of objects. Awareness and interest selects particular focuses. Selective retention allows the memory access to a limited number of memories.

Perceptions and predispositions create a framework to resolve life's questions. Who, what, where, how, and why are answered in terms the mind dictates. Perception is the judgment of the world. It is predicated on stimuli and experience. It is established by predispositions and in turn, it creates future predispositions and expectations. Perception is the mechanism that translates stimuli to information. It allows knowledge to be applied. It is shaped by learning, memory, expectation and attention. It sets the way stimuli are selected, organized, and interpreted.

We see the world as we are, not how it is. Awareness and intentionality allow for targeting and particular emphasis. By intentionally selecting information and operating on these positive cues, an agenda and path develop. Intrapersonal command requires self-awareness and follows this with targeted self-management. For success, predispositions and perceptions need to support goals and agendas. They direct and regulate the quality and direction of performance. They transform awareness into self-management.

Perceptions are predicated on:

- **Perceptual Generalization:** The tendency to group or associate similar stimuli; responding to patterns or stimuli in the same or similar way.
- **Perceptual Differentiation/Discrimination:** Recognizing distinctions between stimuli that create an alternative category and response.
- **Perceptual Distortion:** misinterpretation of physical stimuli based on a wide array of factors that may include situation and/or stimuli decoding.
- **Perceptual Defense:** the process by which it is thought that certain stimuli are either not perceived or are distorted due to their offensive, unpleasant, or threatening nature.
- **Consistency:** The ability to recognize the same object from widely varying sensory inputs.

One has not only an ability to perceive the world but an ability to alter one's perception of it; more simply, one can change things by the manner in which one looks at them.
~Tom Robbins~

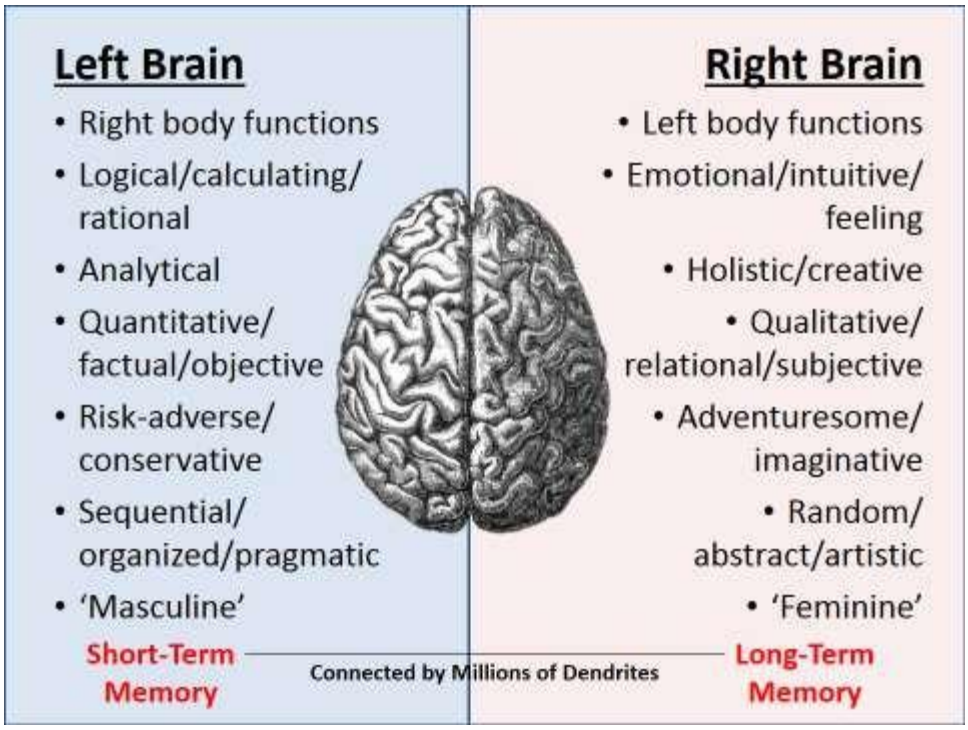
- **Grouping:** There is a natural association of things into organized, coherent patterns. ○ Proximity connects stimuli that are close together. This can be in terms of time or physical location.
    - Similarity sees objects as being part of the same object. ○ Closure refers to the mind's tendency to see complete figures or forms even if a picture is incomplete, partially hidden by other objects, or if part of the information needed to make a complete picture in our minds is missing.
    - Good continuation, common fate, and good form 'logically' extend objects to conform to likely reality.
- **Intensification:** acting with strong emotion when feelings are less intense. **Masking**: hiding true emotional feelings.

When your entire brain is active, that means you are taking everything in through all sense perception. Your entire memory bank and your instincts are in play, so you make much quicker and more intelligent choices. ~Martha Beck~

Don't argue with another person's perception. Don't attempt to discount the way they see the world. Acknowledge feelings. Validate, through empathy, their feelings and how they perceive the world.

From Mind Matters by Robert Jerus

Think with the Whole Brain



The left side of the brain is quantitative, factual, analytical, objective, rational and objective. The right side handles feelings, relationships, imagination, creativity and subjective connections. Everyone has preferences and natural predispositions. While there is 'the whole brain' there are also personal tendencies and predispositions.

There is a misconception that everything to do with being analytical is confined to one side of the brain, and everything to do with being creative is confined to the opposite side. In fact, it is the connections among all brain regions that enable humans to engage in both creativity and analytical thinking. Broad generalizations are frequently inaccurate and/or incomplete. People use their entire brain. Most brain functions are actually distributed across both hemispheres.

Brain styles serve as frameworks for communicating and relating to different people. Treating people as they want to be treated is far more effective than expecting them to adjust and change. Understanding personal preferences also serves to highlight strengths and weaknesses. Success comes from tapping into both thoughts and feelings.

'Whole brain' thinking serves as a foundation to understand learning dispositions. Preferences create frameworks for superior development. In a similar way, these tendencies identify career and relational patterns.

For leadership and influence, thinking processes regulate communication and performance. They serve to demonstrate more effective ways to lead and be lead as well as how to influence and be influenced. Individual patterns in professional and personal settings reveal tendencies. This subtle disclosure of information provides powerful tools in communication and developing relationships. Success comes more naturally to those who have effective self and social awareness. Awareness comes from attention to verbal and nonverbal cues. Brain styles serve as key information for stronger, faster, better connection.

The brain has automatic, quick responses. These options involve little or no conscious effort. These are programmed due to brain function, preference, high application and outright habits. The rest of the mind requires access through mental activities and meaningful, deliberate choice.

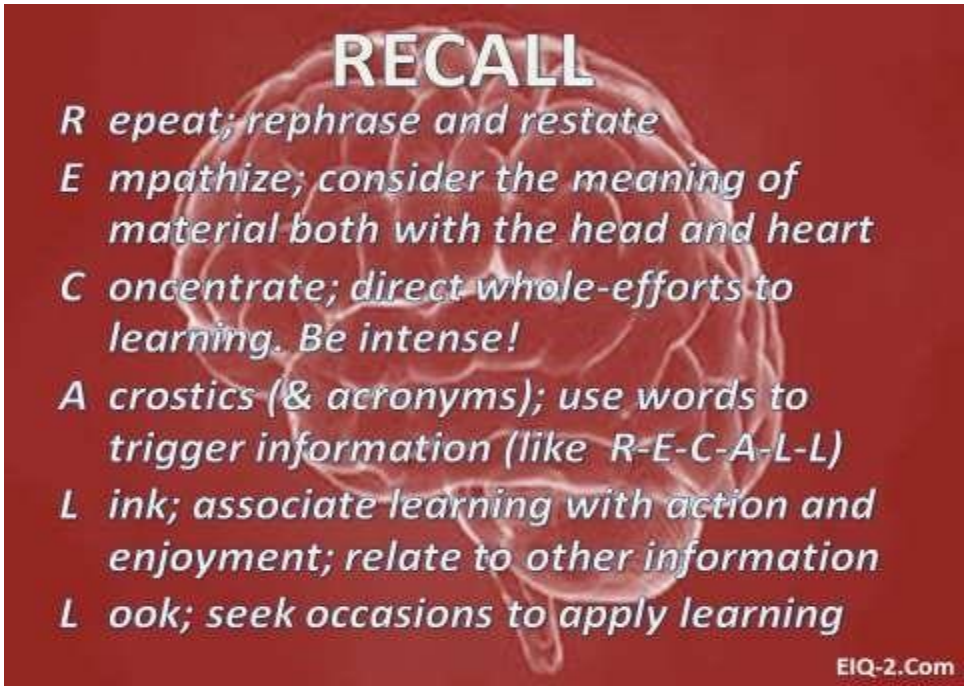
Brain lateralization and hemisphere studies focus on which part of the brain dominates thought and action. Discussion in these areas relates to communication, thinking feeling and performance patterns. There has been controversy about brain hemispheres and their associations. Neurological mapping indicates the truth is that both halves of the brain work together, bilaterally, to accomplish most functions.

Through nurture and personality, neurological pathways become established. Repetition establishes patterns. Understanding the pattern types that individuals are most comfortable with allows for the best connection and superior relationships.

What's important now are the characteristics of the brain's right hemisphere: artistry, empathy, inventiveness, big-picture thinking. These skills have become first among equals in a whole range of business fields.

~Daniel H. Pink~

Improve Memory through RECALL



Memory contains two parts: information and emotion. It begins as data enters the senses. Immediately, there are feelings associated. This information then moves from sensory (less than 1 second) to working memory (less than one minute)/short term (very limited) to long term memory (up to life). For the brain, this is done neurologically both through complex chemistry and electronic transmission by synapses.

Emotions are powerful brain stimulants. They create moments that are 'unforgettable.' Through the technology of the mind, whenever something transpires, it is recorded. A path is then created to find this stored data. It has been said that no information is ever truly forgotten. In other words, the information is still there but the pathway to access it has been lost.

Memory leads to a change in mood to coincide with original feelings. This transition takes about 90 to 120 seconds. Emotional intelligence sets a framework to record and access memories. Information and feelings are applied to successfully respond and create the future.

Is memory organized and readily accessed or scattered and tangential? It depends on personal discipline. There are basic techniques for order that have been shown to be effective:

1. Pay attention. Make active choices regarding thoughts, feelings and memories.

2. When memories are counter-productive and generate negative emotions, move on to something else relatively quickly.
3. Reframe bad thoughts and feelings to good ones.
4. Be intentional and focused when walking down memory lane.

The RECALL system taps into the power of feelings to improve and enhance memory effectiveness:

R epeat: Memory is physically stored in the mind. Repetition focuses attention and creates a stronger path to information. It makes the moment significant and vivid.

E mpathize: Consider internal and external relevance. Connect with both the head and heart. Feelings, experiences and moments are more readily remembered when there are deep connections.

C oncentrate: Direct whole efforts to learning. Be intense! If it's important to remember, pay careful attention.

A crostics (& acronyms): Use words and memory devices to enhance trigger information. Make the memories fun.

L ink: Associate learning, and retention with action and pleasure. Relate memories to other stored information.

L ook: Find occasions to remember and apply memories. The more it is applied, the better it will be retained.

Beware of old memories. They tend not to be completely reliable. They are often corrupted and distorted over time. If memories are significant, verify them and share them. Correct and adjust them as necessary.

Identity, self-awareness, attitude and all levels of emotional intelligence are predicated on emotional memory. It makes personality and leads to success or failure. Emotional memory is ultimately under personal control. Define things well and effectively for more constructive application and emotion.

To improve memory:

- Maintain wellness (proper exercise, diet and, sleep) while managing stress
- Connect emotionally: make it fun, meaningful, applicable and rewarding.
- Be excited, energized and enthusiastic about the knowledge.
- Use memory tools: chunking, mnemonics, etc. There are a wide array of effective tools.
- Refresh the memory. Activate cues to retrieve. Practice.
- Rehearse. Think of information clearly when it's fresh. Connect it to the mind via thought, feelings and memory techniques. Practice retrieving it.
- Minimize interference and distortion.

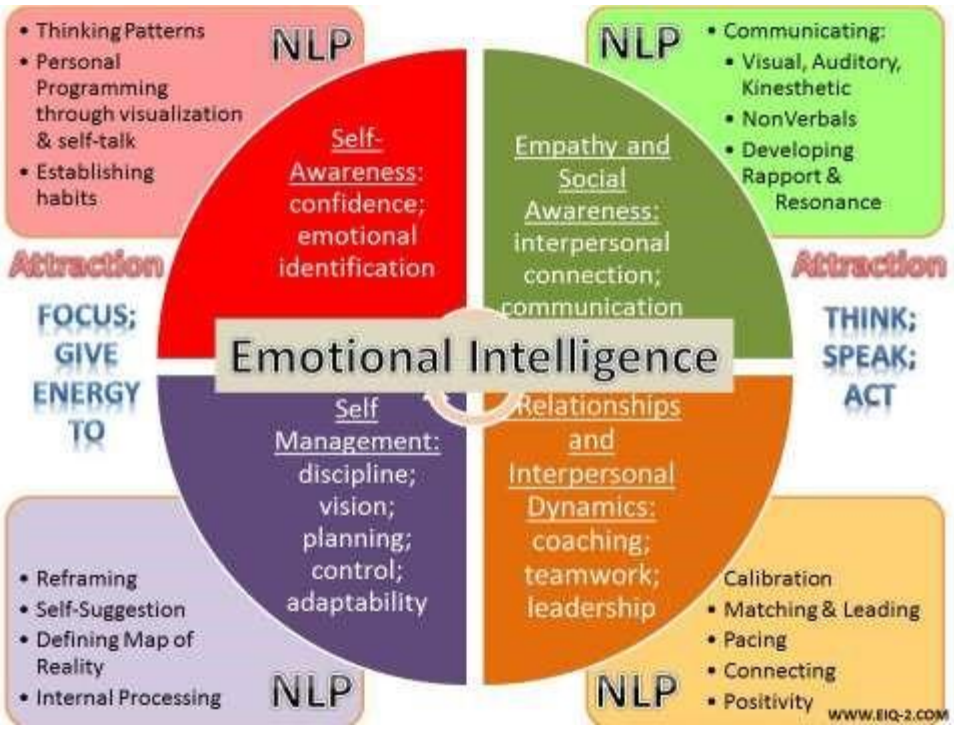
- Relate the data to other information; work with it; review applications; share it with others (explain it, discuss it….); elaborate
- Link it to the physical world…. Connect it to the senses; Talk about it (even internally); act upon it (use it asap)
- Enjoy it. Laughter and fun empower the brain to connect more readily… tap positive associations and avoid negative ones; know what you don't know and explore
- Focus and pay careful attention

The brain is behind the really big questions we have. Who am I, what is my identity? What is that based on? If memories are encoded in connectomes, your personality might be in your connectome. If that's the case, that's the basis of your uniqueness as a person.

~Sebastian Seung~

From Mind Matters by Robert Jerus

Neurolinguistic Programming



The idea of neuroplasticity is simply that the brain changes in response to experience. It changes in response to our actions; it changes in our response to our relationships and communication; it changes in response to specific training. These activities shape the brain, and we can take advantage of neuroplasticity and actually play a more intentional role in shaping our own brains in ways that may be health promoting, and ways that can cultivate well-being.

Neuro-linguistic programming shapes the mind and self-awareness through intrapersonal and interpersonal communication. Inner self-talk creates emotional awareness and sensitivity. It sets the framework for self-management and handling inner challenges. Inner NLP creates personal action and peak performance. Self-talk creates patterns and determines both how information is processed and applied.

Externally, neuro-linguistic programming captures information to empathize and resonate with others. It combines both internal and external data to shape communication as a more effective vehicle to connect relationships.

By selecting the appropriate verbal and nonverbal signals heightened rapport becomes the norm and relationships take on new power. Neuro-linguistic programming uses

language (verbal and nonverbal cues) to shape both internal and external behavior. It programs the mind for thought and feeling.

Some keys to using neuro-linguistic programming:

- Phrase affirmations and inner dialogue in positive, constructive ways. The mind 'hears' negatives differently. When a negative phrase is heard, the image of what is not wanted must be brought up first (thus reinforcing it) and then it is negated. Positives are far more effective.
- Anchors and cues trigger patterns of thought, feeling and behavior. Music, particular words, etc. lead to particular states of mind. Set anchors intentionally. Frame and reframe language to trigger positives.
- Focus on what you want rather than what you don't. Develop a strong positive direction to focus thought and performance.
- Maintain an active awareness of goals and dreams.
- Gain the support of the subconscious by actively generating positive thoughts. The conscious and subconscious are in touch.
- As you begin to think about some change you want to make, ask yourself questions that relate to the different levels:
    - Environment: external factors that help or hinder ○ Behavior: actions or reactions in the context of the environment ○ Capabilities: how performance can be impacted
    - Beliefs and values: reinforcement that supports or denies constructive capability
    - Identity: sense of self, self-awareness, self-image and confidence ○ Purpose: overall mission… What for? For whom?
- Overcome fears, limitations and constraints: reframe (reconstruct) thought processes and belief systems to be positive and affirming
- Develop influence and connection through rapport: understand others, note the cues they send (visual, auditory and kinesthetic) and respond in kind
- Manage sensory awareness: take time and make the effort to apply all senses and use them constructively to create a positive, winning view of the world
- Manage outcomes: focus action, thought and feeling on the vision of success and achieving goals
- Be flexible: when something is not working, reprogram
- Test reality and perceive paths to achieve
- Expect positive results; recognize the positives that come with effective actions and peak performance
- Focus on the present and the future

- Mirror and match to connect: rephrase and reflect conversations (paraphrase and repeat); keep pace; respond in kind (use the same tempo, structure, and imagery)
- Use positive, optimistic language intrapersonally and interpersonally

For success:

- Know precisely what is desired: fine tune and create clear mental definition
- Take action: perform in accordance with success as a foregone conclusion
- Be tuned in: note internal and external signals: take in what works and what does not; adjust and reframe
- Be flexible: adapt and adjust; revise and reframe.

Brains aren't designed to get results; they go in directions. If you know how the brain works you can set your own directions. If you don't, then someone else will.
~Richard Bandler~

From Mind Matters by Robert Jerus

Consider What He Thinks/She Thinks

Men and women display different mind and heart patterns based both on biology and on nurturing. The male brain is characterized by *systemizing* and *mechanistic* thinking. "Systemizing" is the drive to analyze, explore, and construct a system. The systemizer intuitively figures out how things work, or extracts the underlying rules that govern the behavior of a system. The purpose of this is to understand and predict the system, or to invent a new one.

In contrast, the female brain is characterized by *empathizing* tendencies or *mentalistic* thinking. "Empathizing" is the drive to identify another person's emotions and thoughts, and to respond to them with an appropriate emotion. Empathizing occurs when we feel an appropriate emotional reaction in response to the other person's emotions. The purpose of this is to understand another person, to predict his or her behavior, and to connect or resonate with him or her emotionally.

The difference between "mechanism" and "mentalism" is similar to the difference between "systemizing" and "empathizing." In short, mechanism is about figuring things out; mentalism is about understanding people.

While males are taught to compete and emphasize tasks, females are encouraged to play and work together prioritizing relationships. While there are obvious individual distinctions, there are some common themes: 1) males tend to be larger thus, their brains

are larger (male brains contain about 6.5 times more gray matter -- sometimes called 'thinking matter" -- than women. Female brains have more than 9.5 times as much white matter, the stuff that connects various parts of the brain, than male brains); 2) relationships and empathy tend to emphasize the 'right' side personalities while tasks, logic and numbers are more 'left' brain focused. More males are 'left' brain personalities; more women are balanced; 3) males tend to perform slightly better on task oriented and mathematical problems; 4) when faced with stress situations, men tend to employ 'fight or flight' tactics, while women use a 'tend or befriend' response; 5) women tend to have superior skills in relationships, languages and communication; 6) women are faster and more accurate at identifying emotions and may be better at controlling and expressing those emotions (men and women experience the same amount of emotion, but women tend to be more demonstrative); 7) males tend to have better spatial skills; and 8) Men are more likely to be dyslexic or have other language disabilities. Males are also more prone to autism, ADHD and Tourette 's syndrome, while women are more susceptible to mood disorders like anxiety and depression.

When these factors come together, there are patterns for masculine and feminine communication, relationships and emotional patterns. These come from both nature and nurture. Some major distinctions:

- Women tend to be more comfortable with emotions: understanding, empathizing, expressing and feeling
- Men tend to be more direct and task oriented while women are more relational
- Men prioritize winning, control, power and results whereas women emphasize teamwork, processes and connection
- Women stress listening, feedback, courtesy and participation in communication while men are more directive, analytical and declarative

Since patterns are based both on physical differences and social context, patterns are generalizations with many exceptions. As individuals grow and mature both personally and professionally, the emotional intelligence distinctions become far less pronounced. This seems due in large part to awareness, self-management and understanding of relational demands.

Men are motivated and empowered when they feel needed. Women are motivated and empowered when they feel cherished.

~John Gray~

From Mind Matters by Robert Jerus

Sacrifice to Achieve

Self-discipline and control determine long term achievement. The key lies in defining what is worth sacrificing for what is ultimately worth having. Life offers the choice of the pain of discipline or the pain of regret.

Achievement lies in commitment to long-term goals. It is the path that exercises self-control to overcome obstacles and stay on track. Distractions and postponements delay or deny success. Discipline is the exercise of development, practice and readiness. It sacrifices immediate gratification in exchange for delayed high value returns. Self-discipline and control are developed habits. They become effective at getting the highest returns from time, effort, resources and action.

Developing constructive habits sets the stage for winning. These habits are developed through continual self-discipline, persistence, perseverance, tenacity and control. Set the objectives today. Use visualization and positive self-talk to aid performance. Imagine the reward that come from success. By committing to daily management and performance, habits are sewn. When these habits become part of daily discipline, excellence and achievement become reachable.

Self-discipline is a daily chore. Long-term objectives are reached through short-term sacrifice. With achievement in mind, the habits of daily discipline and sacrifice create the strength and inner resolve for long-term championships.

Master self-discipline and will power by:

- Use systems and plans to prepare for each day and hour (willpower alone is not enough)
- Create schedules and budgets. Have deadlines. Articulate them verbally and in writing.
- Commit to perform, even when it's uncomfortable, difficult or inconvenient. Don't wait until you 'feel like it.'
- Take things in small, manageable steps.
- Recognize and manage impulses and urges.
- Avoid temptations. Postpone gratifications for higher rewards.
- When you fail, forgive yourself and reset.
- After the course is set, see it through. Finish.
- Create visual aids and written progress reports.
- Bend, but don't break. Substitute and compromise to support stronger will power.
- Do not accept excuses.
- Re-focus. Don't emphasize sacrifices and negatives but look towards positive gains.
- Expect success. Think long-term.
- Establish positive, supportive habits.
- Set a supportive environment complete with organization, coordination, resources and supportive relationships.
- Avoid trivia, distortion, compromise, tangents or 'bright, shiny objects.'
- Set intrinsic and (maybe) extrinsic rewards. Celebrate and reinforce. Use conditioning tools.
- Work with and accountability partner or coach.

It is one of the strange ironies of this strange life that those who work the hardest, who subject themselves to the strictest discipline, who give up certain pleasurable things in order to achieve a goal, are the happiest men.

~Brutus Hamilton~

"Self-respect is the fruit of discipline; the sense of dignity grows with the ability to say no to oneself." Abraham J. Herschel. Sacrifice foregoes immediate gratification for long-term achievement. It creates discipline to achieve long-term, high value objectives. Set the path to victory and stay the course.