The Science Behind Coaching

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About This Session

• Is not a “Learn about Coaching 101” session.

• Brain Science is an evolving field, multiple models exist for complex processes

• Though I explain a “process” by itself, the brain “parallelizes” a lot of processes at the same time

• Same brain regions can be active during different processes

• Neuroplasticity – Your brain can and will change
How It Works - You Choose

1. Apply what we learnt by learning about Self-awareness

2. Or

Empathy, Mindreading and Mirror Neurons

Brain’s Braking System and Emotional Regulation
The Basics First: Triune Brain

<table>
<thead>
<tr>
<th>Lizard Brain</th>
<th>Mammal Brain</th>
<th>Human Brain</th>
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<tbody>
<tr>
<td>Brain stem &amp; cerebelum</td>
<td>Limbic System</td>
<td>Neocortex</td>
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<tr>
<td>Fight or flight</td>
<td>Emotions, memories, habits</td>
<td>Language, abstract thought, imagination, consciousness</td>
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<td>Autopilot</td>
<td>Decisions</td>
<td>Reasons, rationalizes</td>
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The Triune Brain in Evolution, Paul MacLean, 1960
Empathy, Mindreading and Mirror Neurons

Empathy Bear feels your pain
Exercise: Rock – Paper - Scissors
Theory of Mind (ToM)

Mentalizing

first-order

second-order

third-order
Mentalizing is non-trivial
Rock Paper Scissors Lizard Spock

diagram showing the relationships and interactions between the elements with directional arrows and words indicating the outcomes (e.g., covers, crushes, cuts, vaporizes, decapitates, eats, poisons, smashes).
The New Game – RPSLS variation
The New Game ... With Emotions

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<tbody>
<tr>
<td>happy</td>
<td>sad</td>
<td>content</td>
<td>angry</td>
<td>grumpy</td>
<td>confused</td>
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<tr>
<td>tired</td>
<td>scared</td>
<td>frightened</td>
<td>hurt</td>
<td>depressed</td>
<td>anxious</td>
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<tr>
<td>nervous</td>
<td>thoughtful</td>
<td>Silly</td>
<td>annoyed</td>
<td>frustrated</td>
<td>bored</td>
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<tr>
<td>excited</td>
<td>surprised</td>
<td>proud</td>
<td>interested</td>
<td>out of control</td>
<td>embarrassed</td>
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Empathy (Feeling Into .. ) Process

• Mind Reading (i.e. decoding others’ emotions)
• Affect(emotion) Matching
• Empathic Motivation (positive regard with non-fleeting concern)
Science Behind Coach as a Mirror
Mimicking Emotions
Brain’s Braking System and Emotional Regulation
Lets Talk About Emotions

- Optimism
- Love
- Serenity
- Joy
- Acceptance
- Trust
- Ecstasy
- Admiration
- Vigilance
- Terror
- Fear
- Appreciation
- Awe
- Loathing
- Amazement
- Grief
- Surprise
- Distraction
- Disappoval
- Remorse
- Pensiveness
- Boredom
- Disgust
- Sadness
The Thinking vs. The Feeling
The Thinking vs. The Feeling

Slow Accurate Rational (Thinking) vs. Fast Approximate Action (Feeling)
The “Negative” Limbic Arousal
Would You Buy a Car If ...

• The brakes are fragile, get worn out easily
• Works only now and then and is temperamental
• Capacity to apply brakes decrease each time you use it?
• Consumes a lot of “fuel” when you use the brake?
Our Brain’s Braking System

Motor (associated with movement)  Self Control

Cognitive ("thinking")  Self Control
Cognitive (Thinking Based) Emotional Regulation

- Suppressing Emotions
- Incidental Emotional Regulation (Labeling/ Symbolic Labeling/ Affect labeling/Naming Emotions)
- Intentional Emotional Regulation (reappraisal, reframing, normalizing, reinterpreting, perspective taking)
- Mirror Neuron Intervention
Labeling / Naming Emotions

HELLO
My emotional state is
Exercise:
What questions can you ask your coachee (Client) so that he/she can "label" emotions?
Intentional Emotional Regulation

Cognitive Reappraisal:

be the captain of your own ship
Intentional Emotional Regulation

Perspective Taking:
Mirror Neurons

Mirror System in monkey and humans
Counter Mirroring - Mirror Neuron Intervention
Self Awareness
What is Self-Awareness?

“Self-awareness is the capacity to step outside of your own skin and look at yourself with as close to an objective eye as you possibly can”

-Kevin Ochsner
Head of Social Cognitive Neuroscience Lab
Columbia University, New York

“... is our ability to pause before we react. It gives us the space of mind with which we can consider various options and then choose the most appropriate ones”

- Daniel Siegel
Executive Director, Mindsignt Institute
The Five Facets of Self-Awareness

Non-judgment

Capacity of observation

Labeling internal world

Paying attention to present

Non-Reactivity
The Internal Chatter

Default Mode Network
Attention/Control Network
A Wandering Mind...

Reference: A Wandering Mind is an Unhappy Mind by Matthew A. Killingsworth and Daniel T. Gilbert
Exercise: Observe Yourself
Self Awareness and Middle PFC
Measuring Your Self-Awareness
Answers to the Questionnaire

1.
2.
3.
4.
5.
6.
7.
8.
9.
10.
Embracing Mindful Coaching

• Positivity and Learned Optimism
• Empathy
• Emotional Regulation
• Resilience
• Social Intuition
• Perspective taking
• Clearing / Venting
• Metaphors
• Visualization
• Normalizing
References

Social
Why Our Brains Are Wired to Connect
Matthew D. Lieberman

Your Brain at Work
David Rock

Your Brain and Business
Srivinasa S. Pillay

COACHING WITH THE BRAIN IN MIND
FOUNDATIONS FOR PRACTICE
David Rock and Linda J. Page, Ph.D.