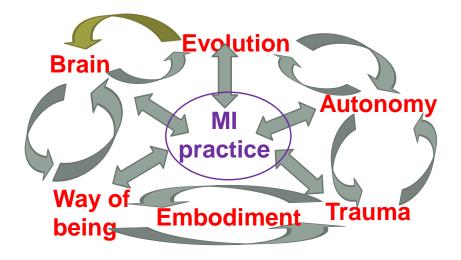
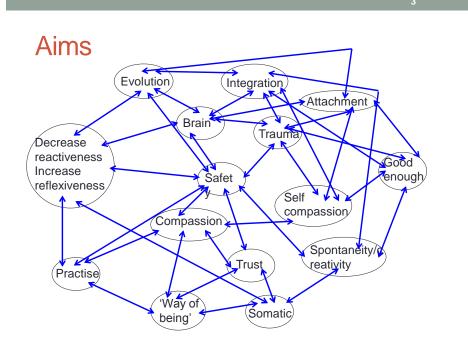
### FIGHT, FLIGHT, FREEZE OR FLOP:

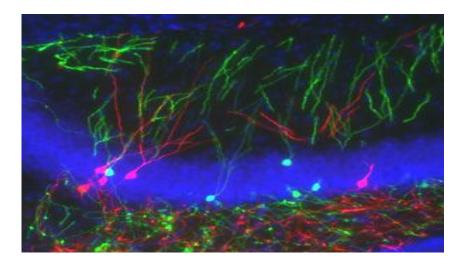
Autonomy in MI and the What the Brain Tells Us

#### Introduction





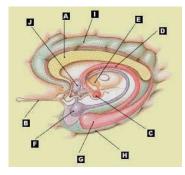
#### Dentate gyrus cells



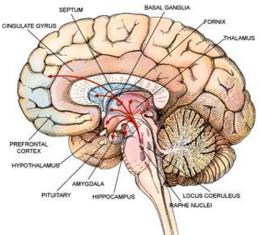
4

## Cross section of the brain showing the limbic system

5

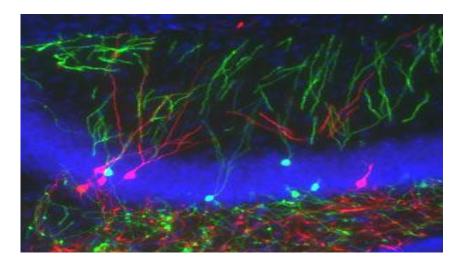


A- Corpus callosum B- Olfactory tract C- Mammillary bodies D- Fornix E- Anterior thalamic nuclei F- <u>Amygdala</u> G- <u>Hippocampus</u> H- Parahippocampal gyrus I- Cingulate gyrus J- Hypothalamic nuclei



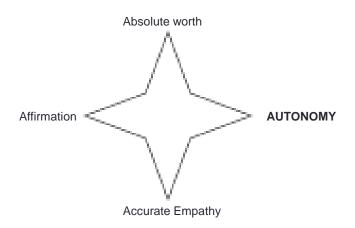
6

#### Dentate gyrus cells



#### Autonomy

#### Four Aspects of Acceptance

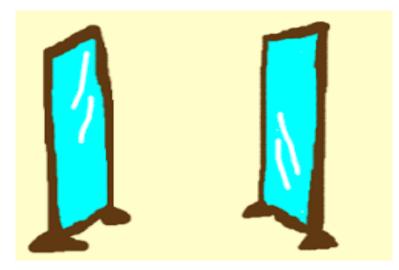


### **Evolution**





### Mirror selves and mirror neurons

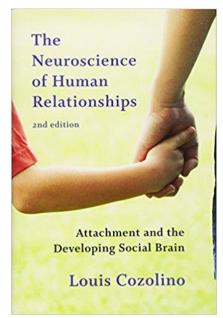




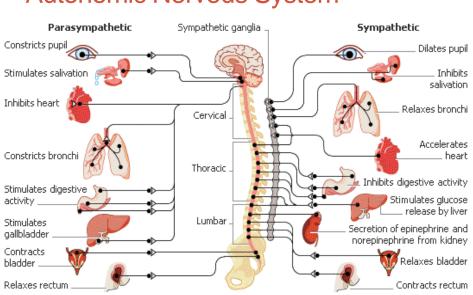
#### Attachment



#### Attachment

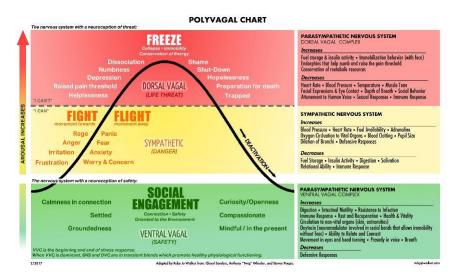




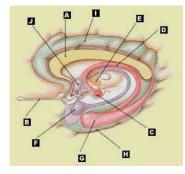


#### Autonomic Nervous System

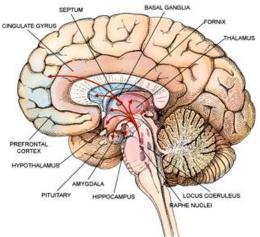
#### The Poly Vagal Nerve



### Cross section of the brain showing the limbic system

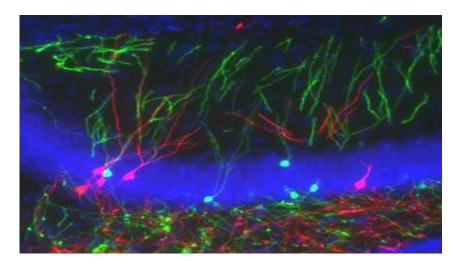


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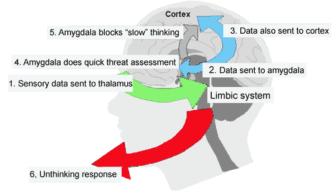
18

#### Dentate gyrus cells



Chronic stress & the 'amygdala hi-jack'

- After traumatic incident, amygdala stays on 'high alert'
- The amygdala hijack impairs capacity to judge threat
- Creates 'unthinking response'



#### Trauma

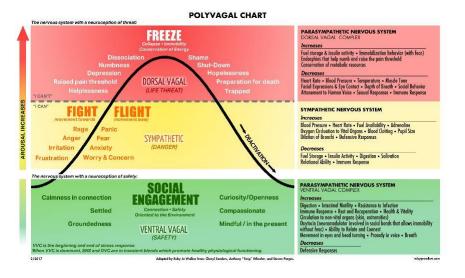
- · Substance misuse and trauma experience:
- 30-58% reported for lifetime Post Traumatic Stress Disorder (PTSD)
- 20-38% for current PTSD
- 'Core shame' "fundamental sense of being defective as a person, accompanied by fear of exposure and selfprotective rage"

- Fight: "I told them to @\*!% off"
- Flight: "I didn't turn up for the appointment"
- Freeze: "I just seemed to shut down"
- Flop: "I just went along with it, said I'd do what they wanted"

# As a client, a [perceived] threat to one's autonomous self

produces a similar response in the brain as to a physical threat, like being punched.

### The Poly Vagal Nerve



#### Autonomy in MI

Autonomy: "[a person's] irrevocable right and capacity to self direction" (Miller & Rollnick 2013 p18)

"A respect for human dignity" Ibid p123

"The opposite of autonomy support is the attempt to make people do things, to coerce and control" *Ibid* p19

"It is our assertion that MI, by virtue of its reliance on discrepancy with intrinsic values, **cannot** work in violation of a person's autonomy." *Ibid* p246

- A threat to one's autonomous self produces a similar response in the brain as a physical threat, like being punched.
- The positive mindset (affirming, strength-oriented) helps the mind/brain integrate connections and brings to life the neural connections in the cortical region (future-goaloriented region) rather than focusing energy in the lower limbic (threat) regions.