

The Neuroscience of Participant Engagement in Collaborative Courts



CACC Conference
September 12, 2018



ZERO POINT LEADERSHIP
Using Science to Unlock Extraordinary Leadership!



What's Ahead

1. What is trauma
2. Brain plasticity and behavior change
3. The adolescent brain
4. A brain-based framework for increasing engagement and motivation for change



Trauma Defined

Individual trauma results from an **event**, series of events, or set of circumstances that is **experienced** by an individual as physically or emotionally harmful or threatening and that has lasting adverse **effects** on the individual's functioning and physical, social, emotional, or spiritual well-being.

SAMHSA 2013

Types of Trauma

- Developmental
- Acute
- Repetitive or Chronic
- Complex
- Historical
- Vicarious



Trauma is Pervasive in Justice-Involved Populations

Women

96% lifetime trauma experiences
74% current trauma experiences

Men

89% lifetime trauma experiences
86% current trauma experiences

Targeted Capacity Expansion Jail Diversion Study (<http://gainscenter.samhsa.gov>)



Breng me 'n grote whisky.
-Wat zitten jullie nou te grinzzen?

Attention



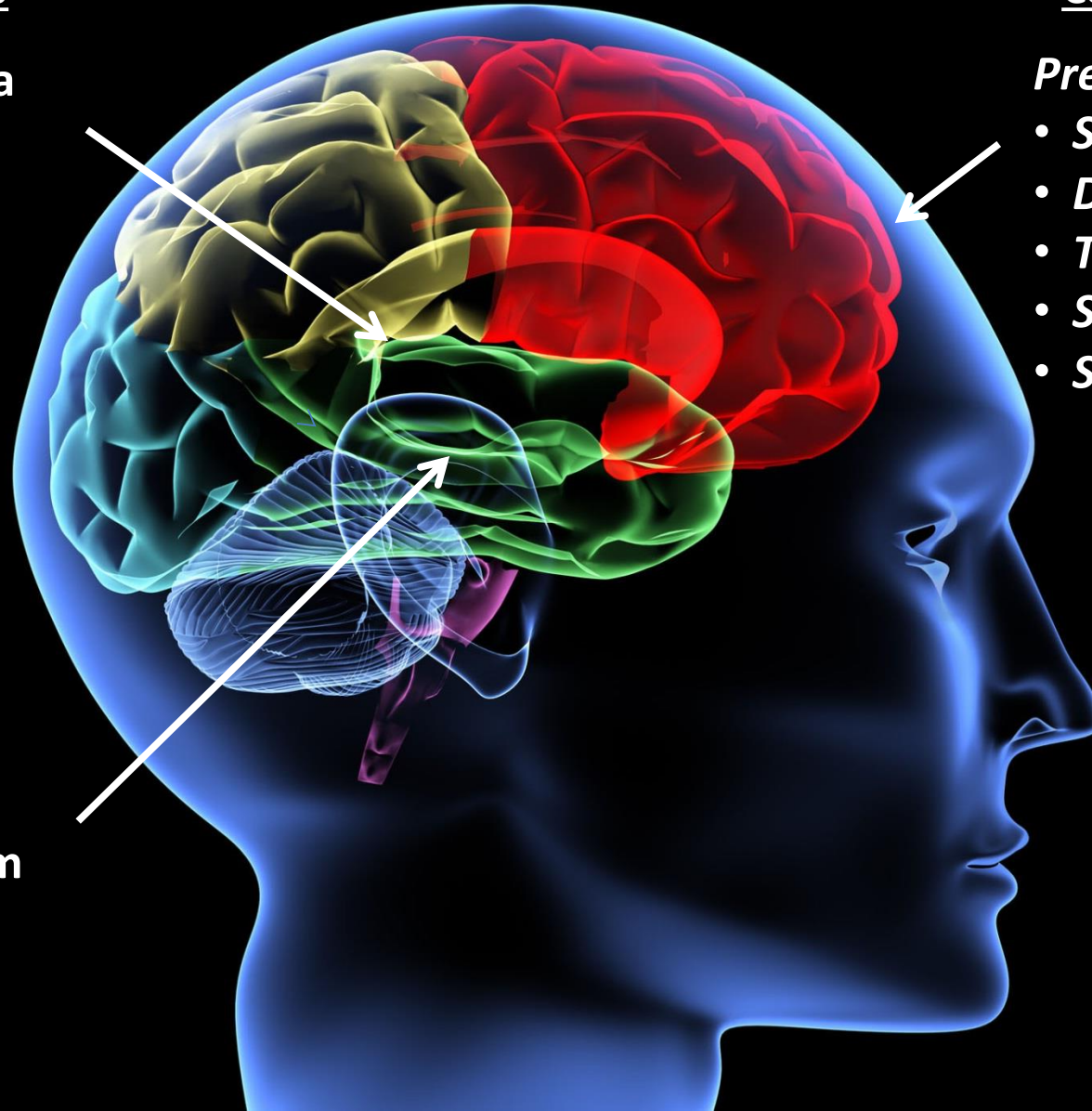
Non-conscious

Basal Ganglia

- *Fast*
- *Automatic*
- *Hardwired habits*
- *Large volume*

Limbic System

- *Emotion*
- *Memory*
- *Motivation*

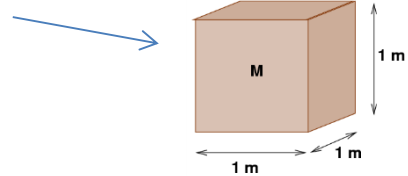


Conscious

Prefrontal Cortex

- *Slow*
- *Decision Making*
- *Thinking*
- *Self-regulation*
- *Small volume*

Conscious



Non Conscious









$$82 \times 7$$

$$= 574$$

11 Million Pieces of Information

Aware of

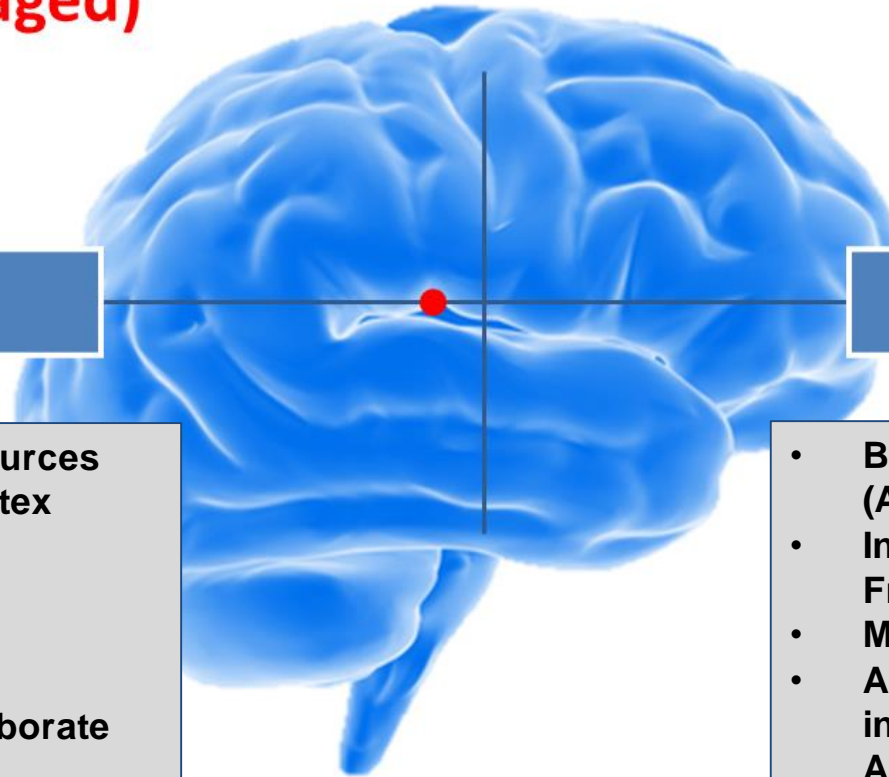
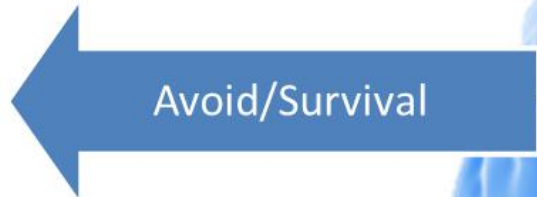
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Minimize Danger, Maximize Reward

Threat/Danger
(Disengaged)

Reward
(Engaged)



- Reduction in thinking resources
- Decrease in Prefrontal Cortex capacity
- Reduction in creativity
- More negative thinking
- Constricted field of view
- Decrease in ability to collaborate
- Increase in mistakes
- Generalize to other areas
- Increase in cortisol (stress hormone)

- Better access to cognitive resources (Amy Arnsten)
- Increase in creative ideas (Barbara Frederickson)
- More Insights (Mark Jung-Beeman)
- Able to see and take in more information (Schmitz, De Rosa, & Anderson)
- Decrease in mistakes
- More collaborative
- Increase in dopamine levels

**Strong predisposition
to threat!**

Social Needs = *Survival*

Our response to the need for food, water and safety from physical harm is the same as our response to how we feel people treat us.



The Social Pain Study

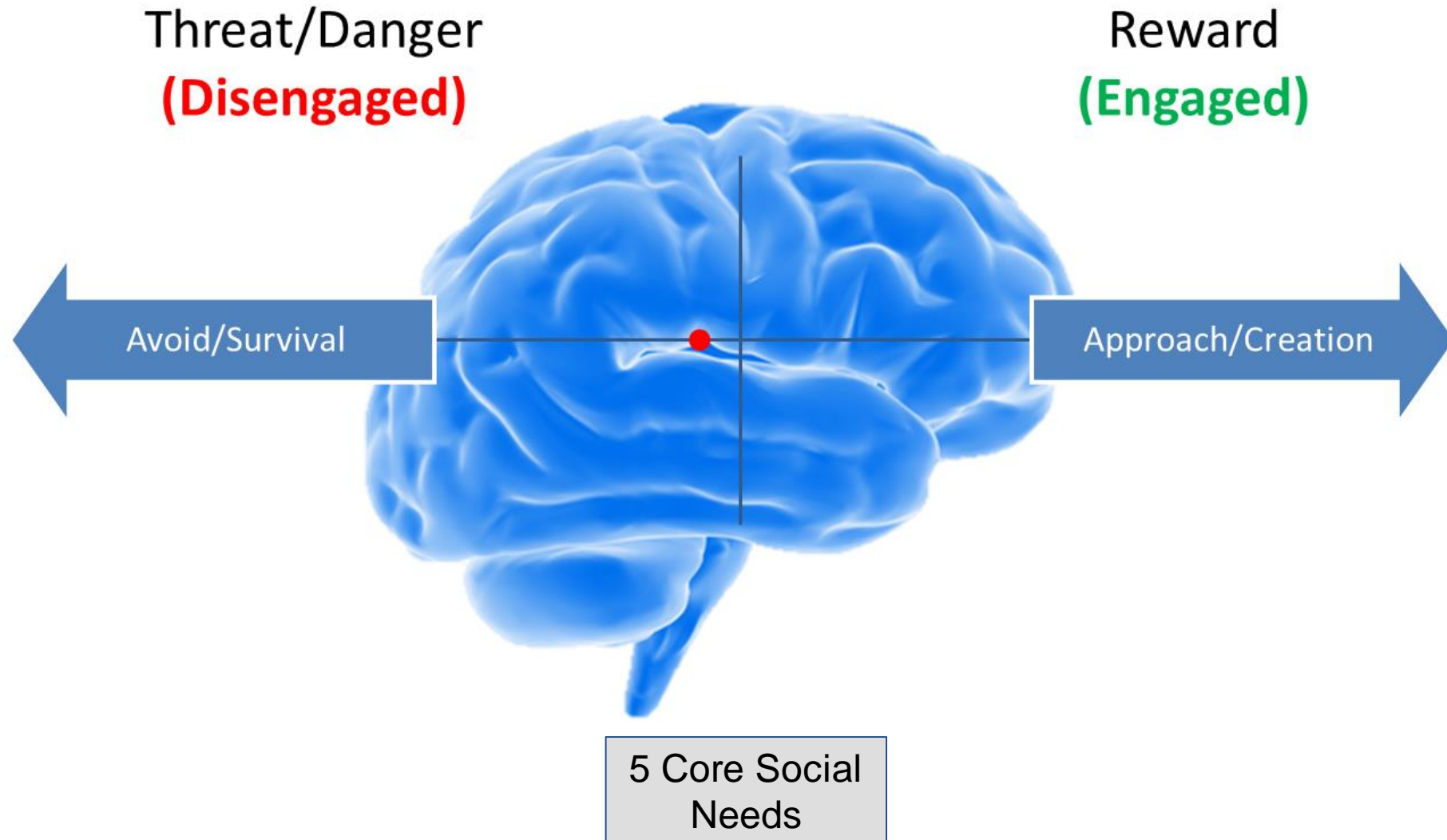
Eisenberger, N & Lieberman, M., 2004

University of California, Los Angeles

YEE (TX)



Minimize Danger, Maximize Reward



Esteem

- Status
- Importance
- How we compare - or rank



Choice

A high-angle photograph of a woman in a red dress walking away on a winding dirt path through a lush green park. The path branches out in several directions, symbolizing choice. The woman is positioned in the lower center of the frame, and her shadow is cast to the left. The overall scene is bright and vibrant, with the green grass and trees providing a natural backdrop.

- **Autonomy**
- **Freedom**
- **Control**

Understanding

- Certainty
- Knowing
- Clarity

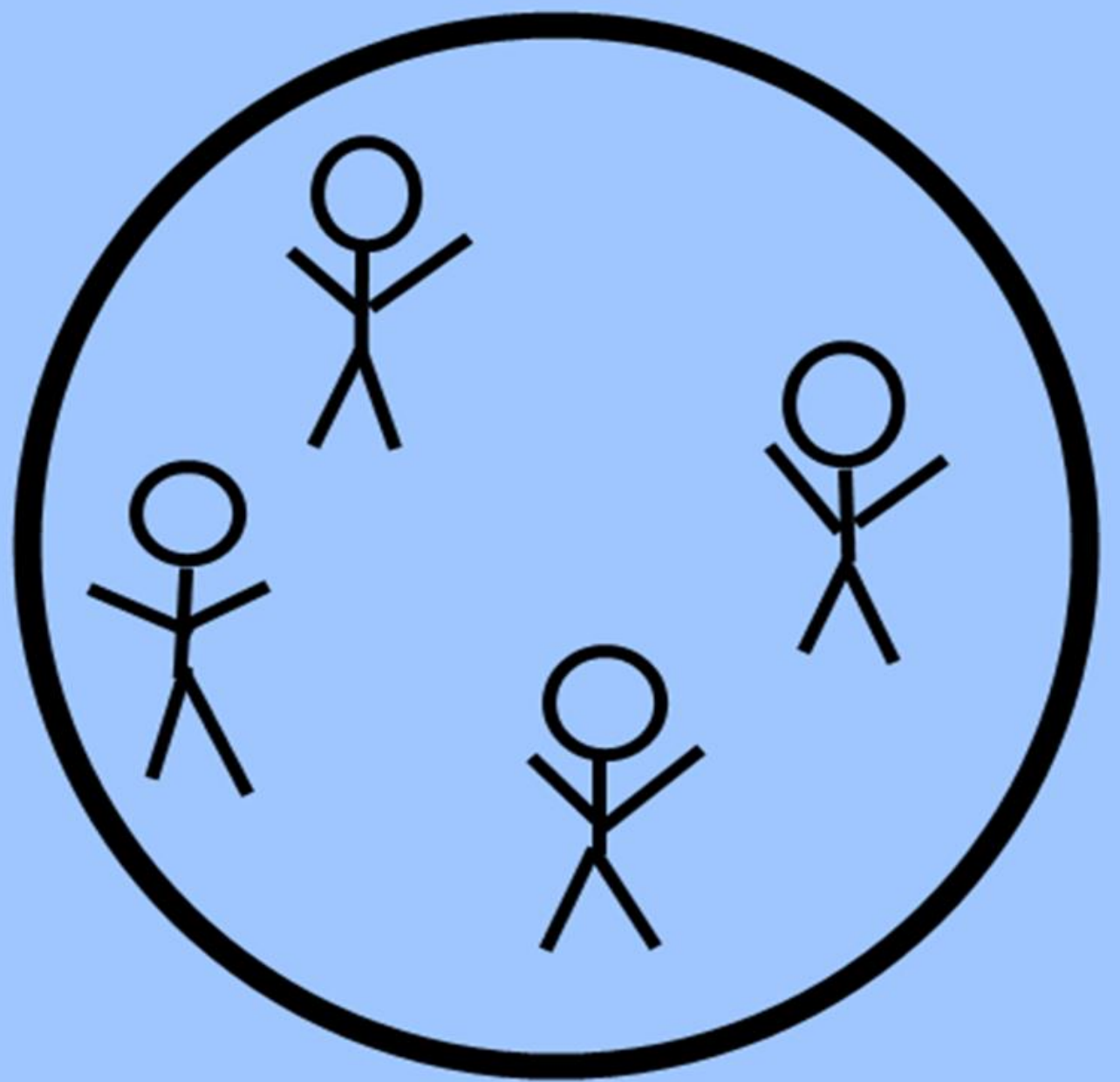


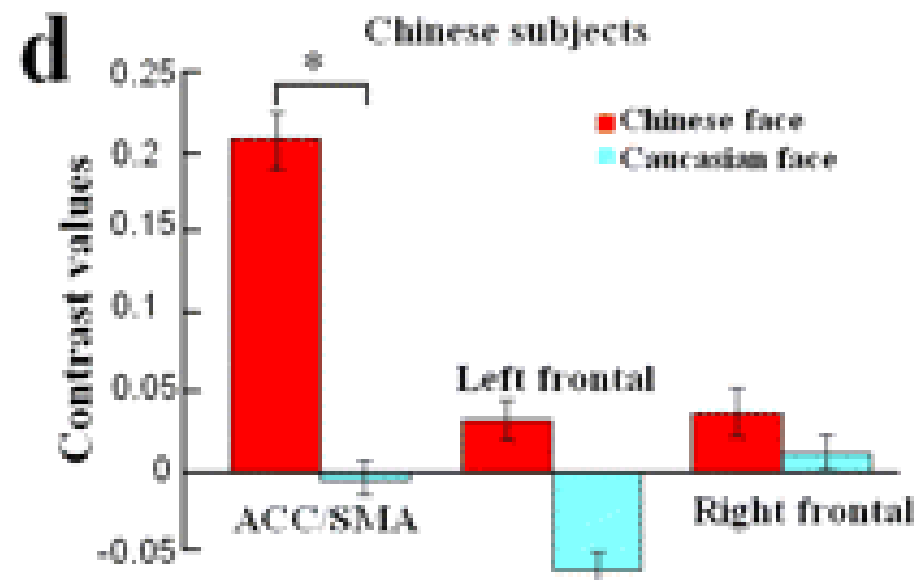
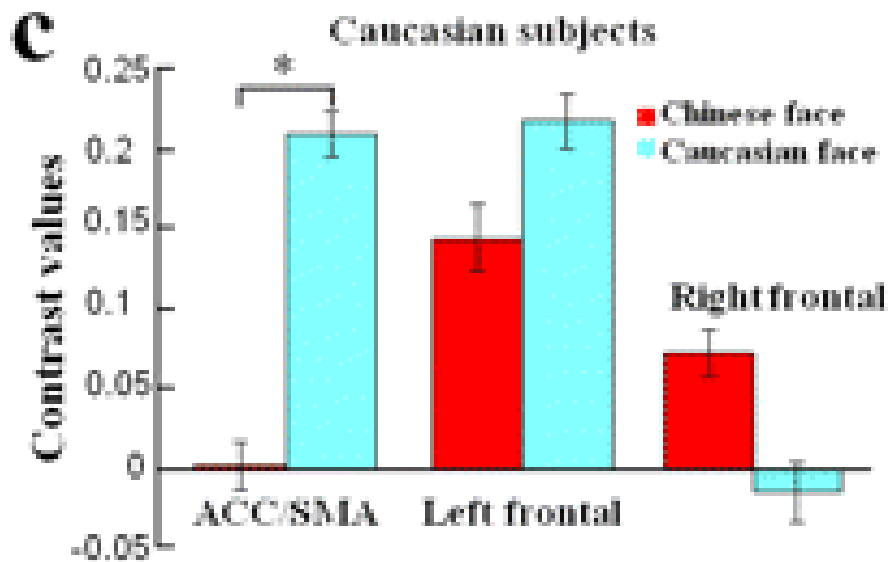
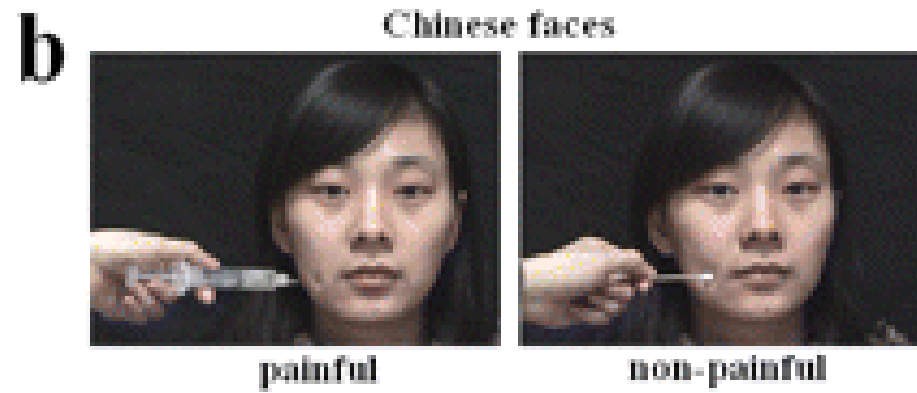
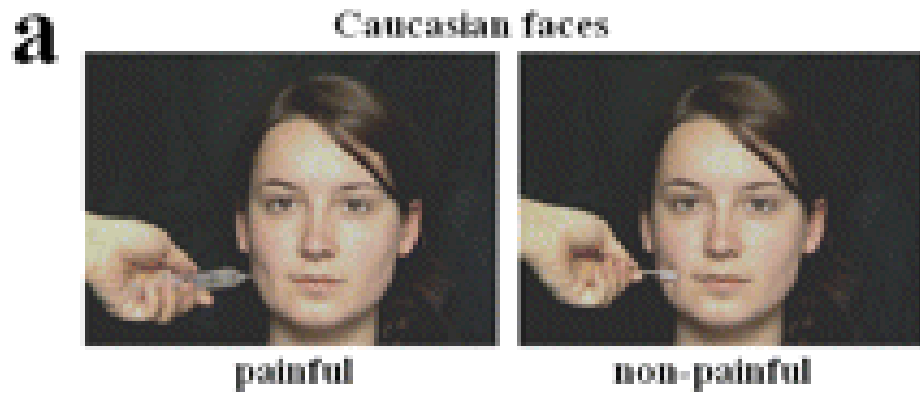
The Brain as Predictor

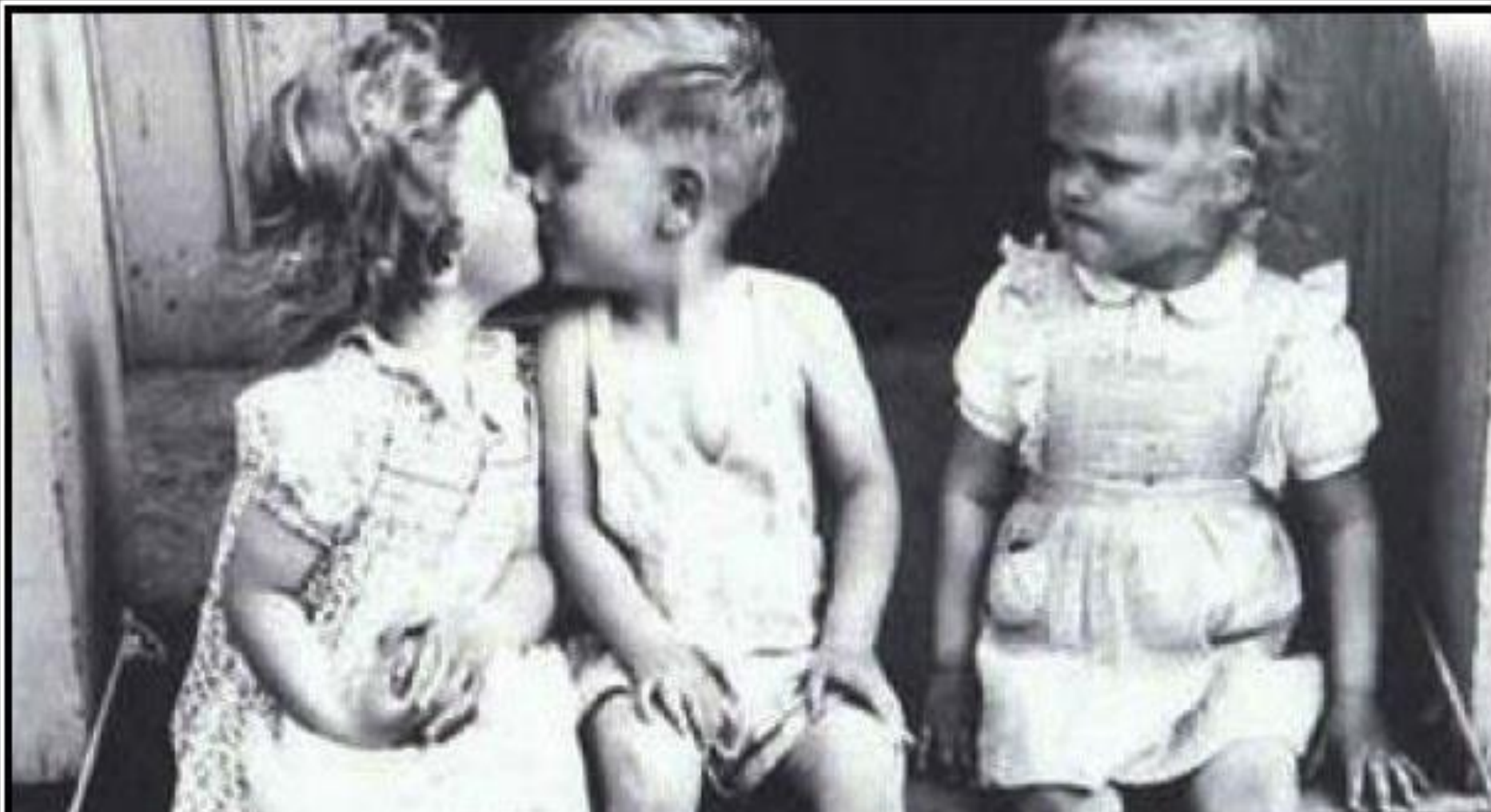
I couldn't believe that I could accurately predict what I was doing. Using the incredible power of the human mind, according to research at Cambridge University, it doesn't matter in what order the letters in a word are, the only important thing is that the first and last letter be in the right place.

Relatedness

- Trust/Safety with others
- Connection
- Friend vs. foe
- In-Group vs. Out Group







Pain in the ACC

Equity

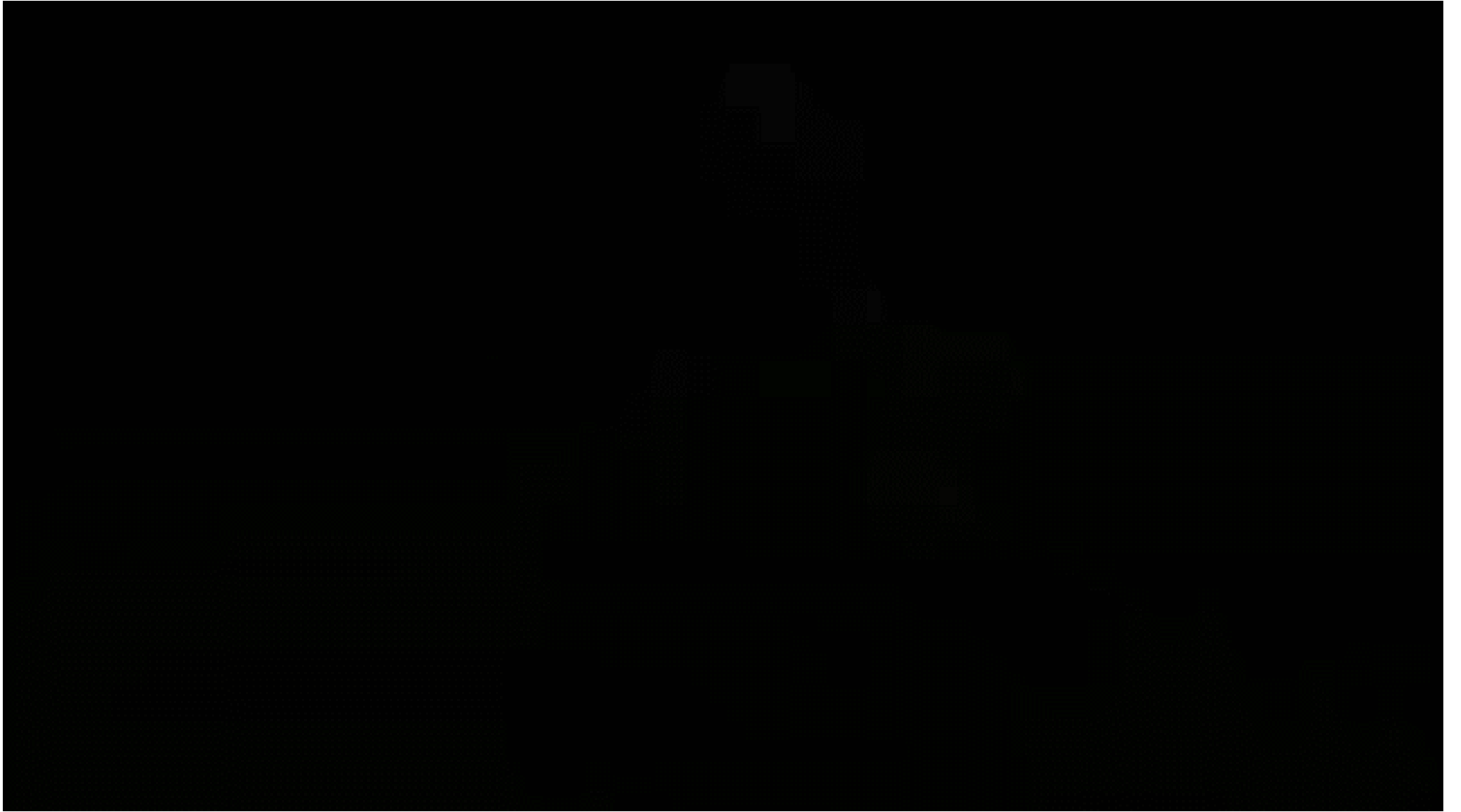


- Perception of fair exchanges between people
- Fairness

Capuchin Monkey Equality Study



Sarah Brosnan Ph.D, Department of Psychology, Neuroscience Institute Georgia State University
Dr. Frans de Waal, Emory University



Self




- Self-mastery
- Self-awareness
- Emotional self-regulation







SECURE Model™



A Brain-Based Framework for Increasing Engagement & Motivation

SECURE Model™



	SELF	Self Awareness; Emotional Self-Management
	ESTEEM	Importance; Status; Purpose; How We Rank
	CHOICE	Autonomy; Freedom; Feeling of Being in Control
	UNDERSTANDING	Clarity; Certainty; Knowing
	RELATEDNESS	Trust; Connection; Safety with others; Friend vs. Foe; In-Group vs Out-Group
	EQUITY	Perception of Fair Exchanges; Fairness; level playing field

A Brain-Based Framework for Increasing Engagement & Motivation

A Few Things You Can Do



- Create mutual goals & “in-group” attitude
- Emphasize connecting rather than highlighting rank
- Pay attention to how people are improving
- Be more transparent and communicate more than you think you need to
- Increase feelings of “being valued” and on the same team
- Give choices and options
- Be clear on the what the expectations are

The image features a composite background. On the left, a human head is shown in profile, with a hand pointing to the forehead. On the right, a brain scan (MRI or CT) is overlaid on a similar head profile. The entire image has a warm, reddish-orange color palette. The text is centered in the lower half of the image.

**The human resistance to change is really
the human resistance to pain.**

What Works

- Focus on solutions/new brain maps
- Approach response/reducing threat
- Decrease vs. increase pain levels
- Work with the deeply social brain in mind
- Self-awareness & Self-regulation



*“Fear destroys the
capacity to learn.”*

- Bruce Perry

