

Neuroscience of Conflict



JEAN GREATBATCH



What is behaviour?

- "Human behaviour is a biological phenomenon, because, ultimately, all theories about human behaviour are theories about the brain - an organ operating on physical principles that receives stimuli, makes computations, and directs behavioural outputs."

Yarn and Todd-Jones

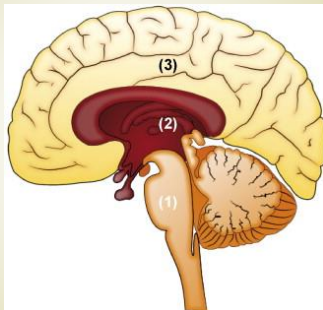
Topics

- Brain functioning during conflict
- Tips and tools for process design
- Q & A

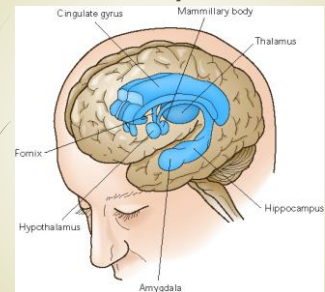
How Brains Evolved

- Pleistocene: Group = Survival
- Groups require: interaction, empathy and conflict resolution
- Human brains hardwired for group harmony
- Today: Human brains operate in the same way

Sections of the Brain

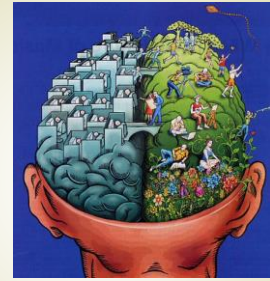


The limbic system



Q & A

- ▀ What behaviours would you expect to see in a stressed out mediation or arbitration participant when
 - ▀ Their amygdala is activated?
 - ▀ Their hypothalamus is not functioning?
 - ▀ Their hippocampus is not functioning?
 - ▀ Their pre-frontal cortex is not functioning?



Hemispheres of the Brain

Left Brain

- ▀ prefers linear, orderly processes and **red**
- ▀ focus on parts; unable to see whole
- ▀ categorizes things & events (label, assume)
- ▀ invents things when we cannot remember, draws mistaken conclusions
- ▀ activated by anger
- ▀ tendency to blame others

Reward centre activation

- ▀ Left brain reward centre activated when we blame someone
 - ▀ Dopamine released at reward centre
 - ▀ We feel good
 - ▀ We repeat the actions that led us to feel good
- ▀ Motivation comes from the cortex, which needs oxygen to be activated

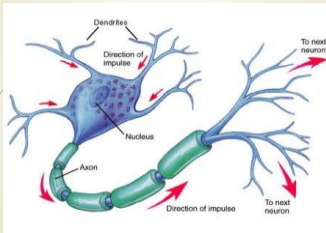
Right Brain

- ▀ non-verbal communication
- ▀ collaborative problem-solving and cooperation
- ▀ sees situations holistically
- ▀ recognizes emotion in others; feels empathy
- ▀ attributes intent to others
- ▀ analyzes emotional meaning
- ▀ inhibits over-reaction
- ▀ OK with uncertainty, non-linear process
- ▀ prefers **green**

Q & A

- ▀ Which side of the brain is most active during adversarial processes?
- ▀ What attributes of the right side of the brain would be useful during mediation?
- ▀ When would a mediator try to activate different sides of a participant's brain?

Neural pathways



Mirror neurons



Memory



Memories - highlights

- The brain chooses what to store
- Events with emotional reactions remembered longer than neutral events.
- Repetition → long-term memory
- Negative memories stored in the amygdala
- Positive memories stored in the hippocampus
- Women remember details of a negative interaction men just the gist

Q & A

How does this information about memory affect fact-finding processes?

Key Things to Remember

- Automatic Responses
- Fallibility of memory
- Different approaches of each hemisphere
- The source of defensiveness
- Reward centres
- The power of mirror neurons
- Neural pathways

Process design implications

Deactivating the amygdala

- Spend time getting to know participants, building rapport with and among participants
- Spend time explaining the process and answering questions about it
- Teach participants self-talk
- Begin sessions with deep-breathing and muscle relaxation exercises

Activating other brain areas

- Ask about sleep deprivation during pre-mediation to determine whether brain functions affecting memory have been affected – if so suggest stress-reduction exercises to aid sleep
- Hold sessions in the afternoon, when cortisol levels are lower
- Lead short walks outside during breaks to get oxygen into the brain

Changing destructive habits

During pre-mediation help participants:

- Identify which habits interfere with constructive conflict management
- Prioritize habits they want to change
- Learn new skills for communicating their emotions and interests (verbal & non)
- Create a homework plan for mastering new skills

Brain hemispheres

Activate right brain (at start of process):

- Wear green
- Use a room with large windows overlooking green space
- Put a green plant/piece of cloth in the centre
- Play repetitive calming music when people enter the room (Gregorian chants work)
- Use story-telling, metaphors and humour

Reward centre

- Ask people to bring a photograph of a loved one to look at before you start
- Hang pictures of Nelson Mandela, Martin Luther King and other inspirational people on the walls where participants can see them
- Ask people to imagine a person they love is sitting next to them for the whole process

Mirror neurons

- Use constructive language "building" consensus
- Show compassion on your face
- Sit forward, smile and nod
- Ask participants to name the emotion they felt at the time and show it on their face

Memories and "fact"

- In pre-mediation explain that different memories of events are normal
- When different versions of events are given, welcome the difference

Other considerations

- Ask whether a certain smell was in the air when an unpleasant event happened
- Keep sessions short
- Encourage participants to let their minds wander to generate creative thinking
- Hold sessions in unfamiliar surroundings

Q & A

Take 5 minutes to discuss:

- How does this overview of how the brain functions during conflict help you make sense of experiences you have had as a mediator, arbitrator or counsel?

Be prepared to briefly share your observations with the large group.

Homework!

How will you apply these process ideas to the ADR systems you design or lead?

Questions?