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Simplifying Non-Pharmacological Treatments for Chronic Pain: Part 1

Mindfulness and Chronic Pain

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Learning Objectives

At the end of the session, participants will be able to:

- define mindfulness and its applicability to family medicine
- practice mindfulness techniques to be used by family physicians
- describe the connection between mindfulness practice and improved chronic pain outcomes



Mindfulness is . . .

Paying attention (being aware):

in a particular way

on purpose

in the moment

non-judgmentally

Paying attention . . . in a particular way

Grounding

See / See / See

Hear / Hear / Hear

Feel / Feel / Feel

Paying attention . . . on purpose



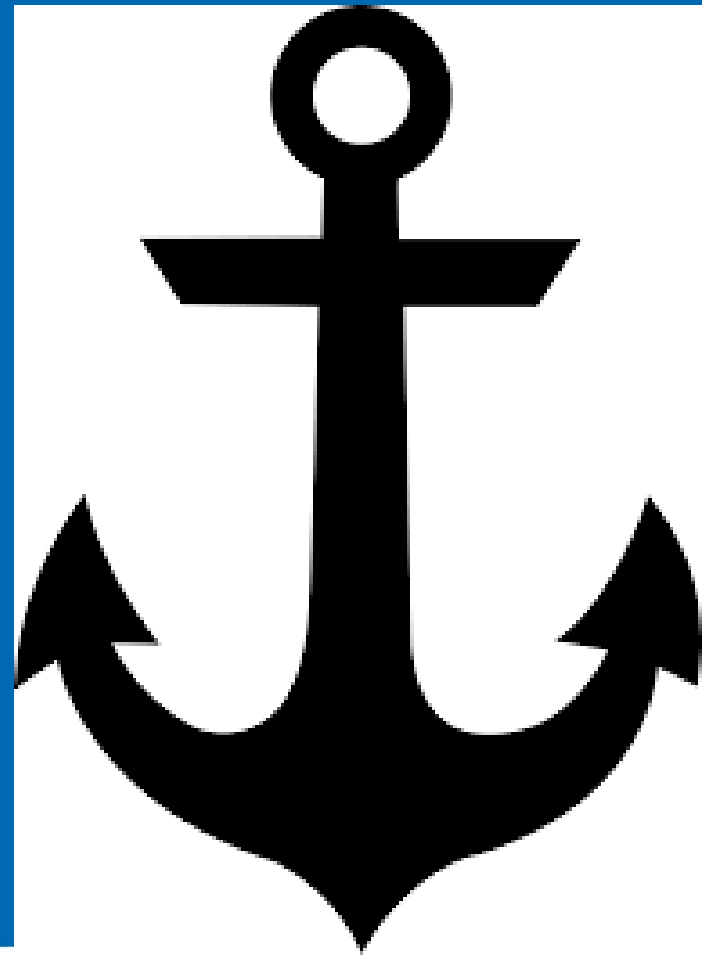
Paying attention . . . on purpose

Mindfulness is not . . .

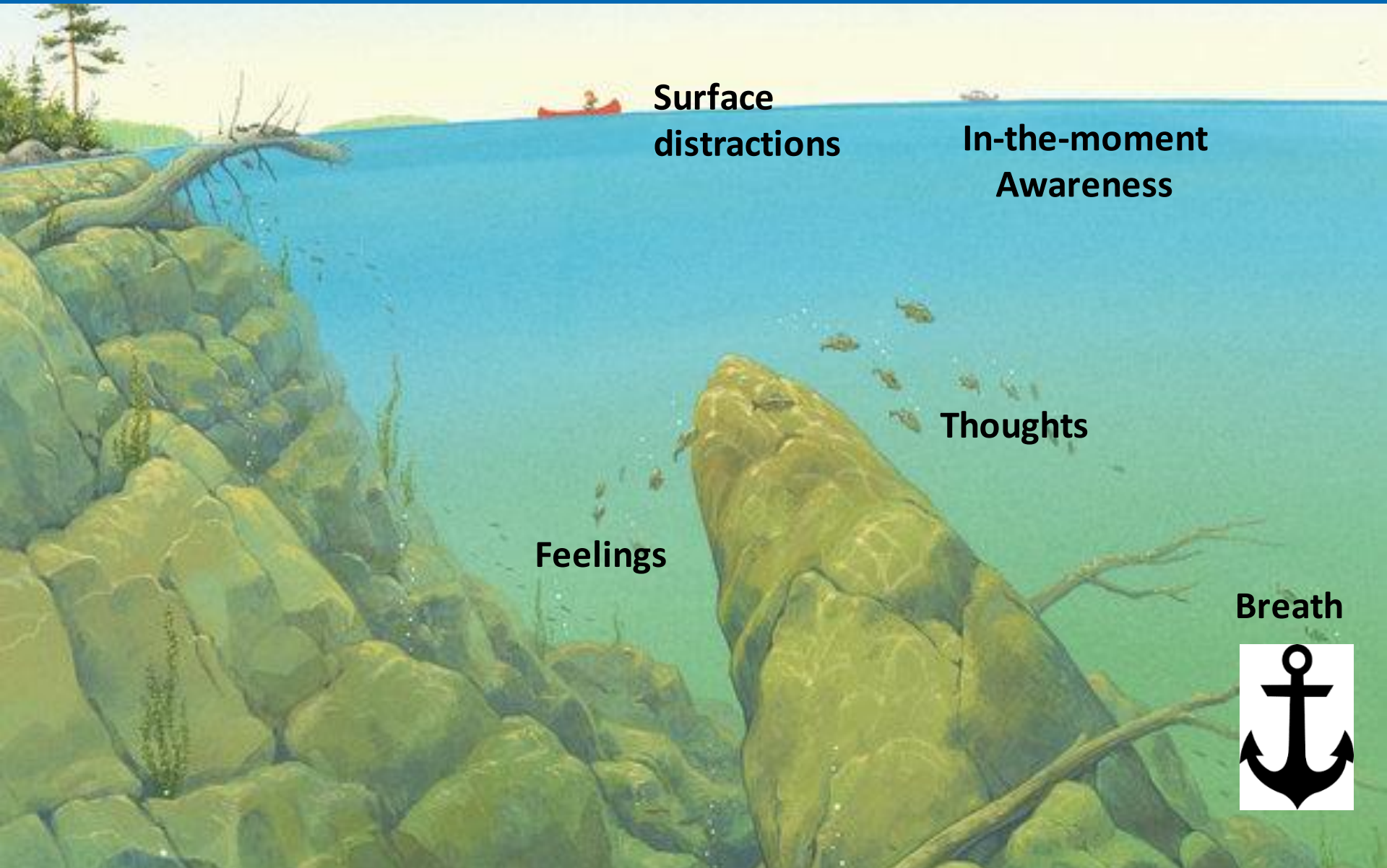
- Relaxation
- Guided imagery
- Progressive muscle relaxation
- Time for a nap

Paying attention . . . in the moment

- Why breath?
- Why body scan?



Paying attention . . . in the moment



**Surface
distractions**

**In-the-moment
Awareness**

Thoughts

Feelings

Breath



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Mindfulness is . . .

Paying attention (being aware):

- *in a particular way*
- *on purpose*
- *in the moment*
- *non-judgmentally*

Focused attention

Open Awareness

Task Positive vs Default Mode Networks

Task Positive Network

- Attention-demanding tasks
- Self Control
- Dorsolateral and ventrolateral frontal and prefrontal cortices and the insular cortex



Default Mode Network

- Day-dreaming
- Rumination, emotional dysregulation
- Posterior Cingulate Cortex & medial prefrontal cortex



Basic review of processes

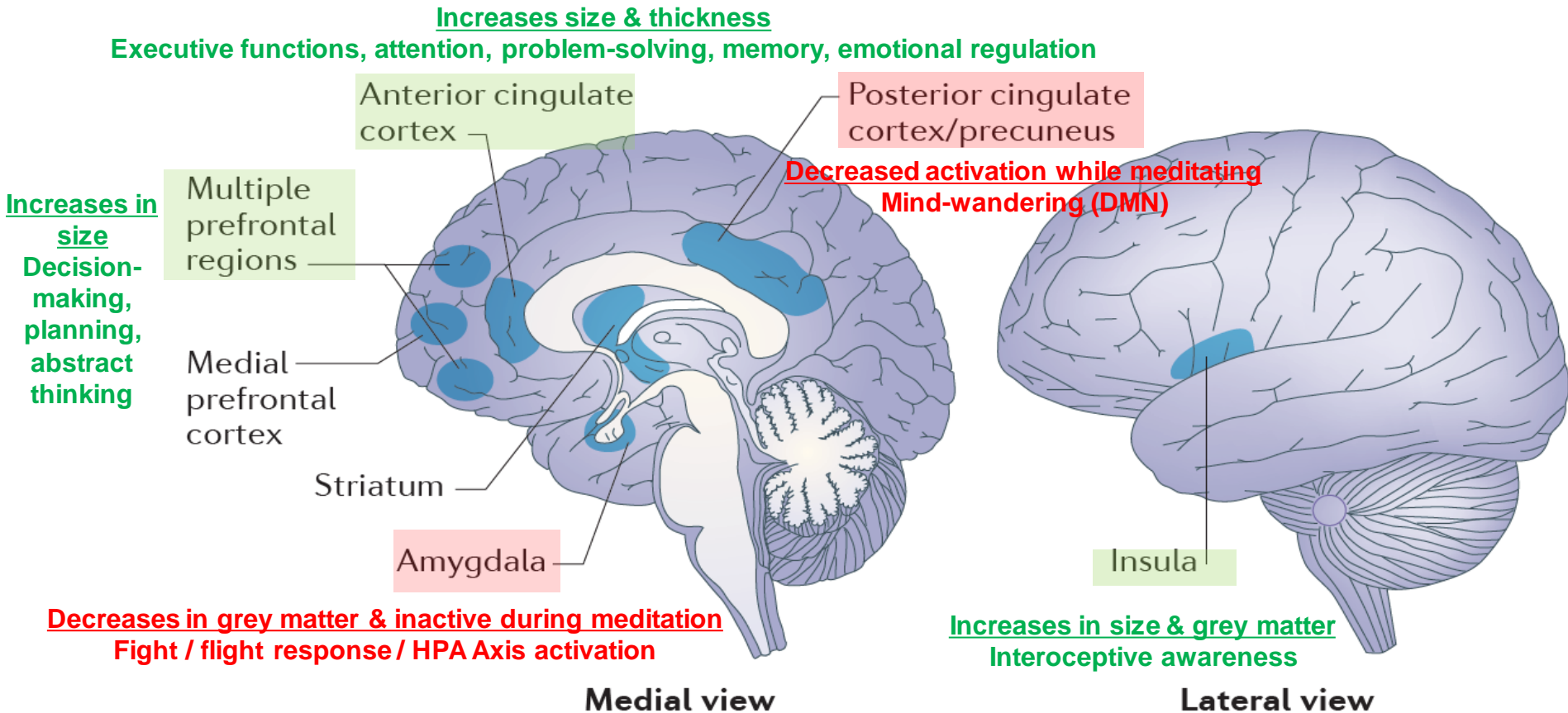
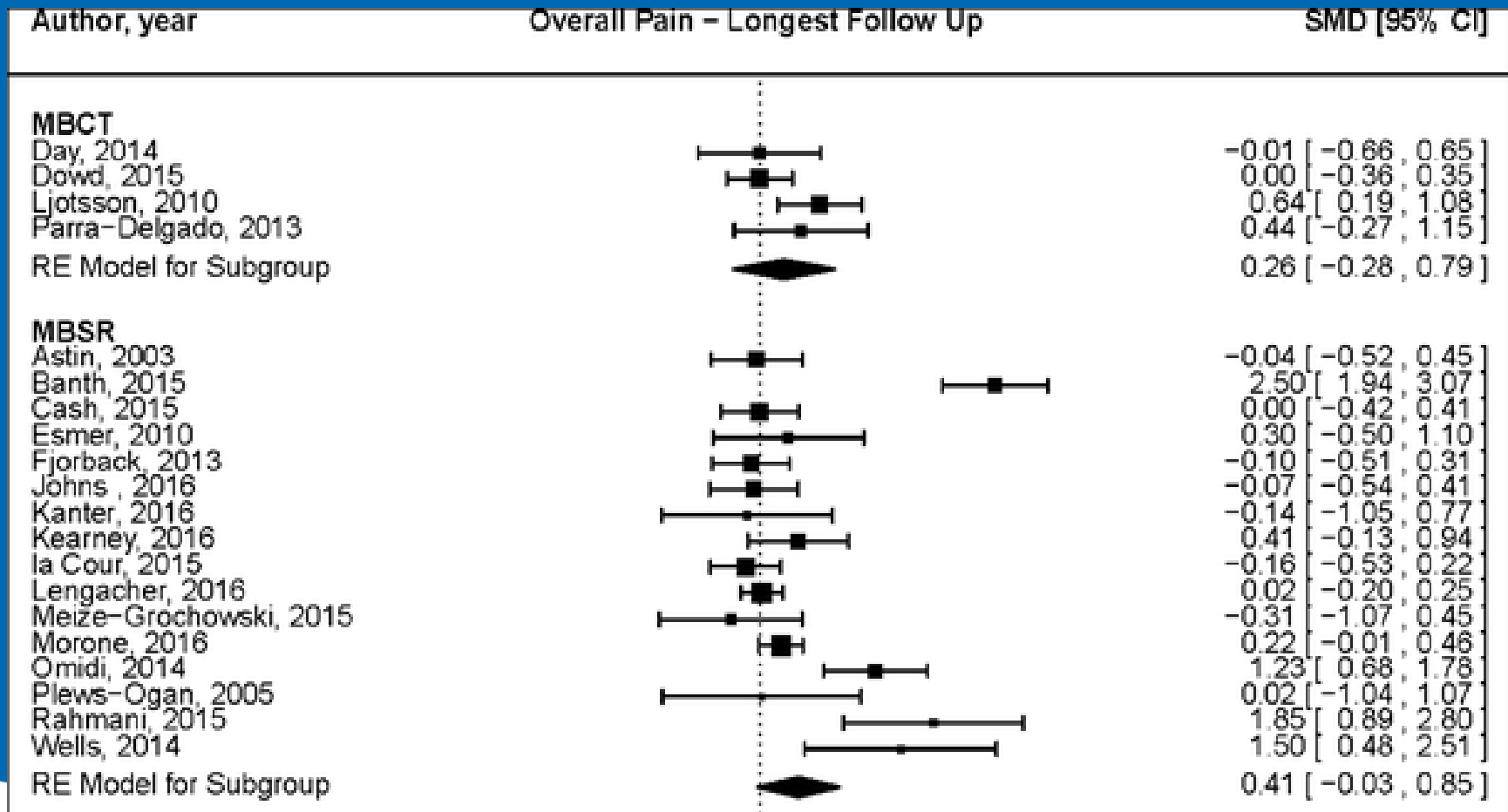


Figure 1 | **Brain regions involved in the components of mindfulness meditation.** Schematic view of some of the brain regions involved in attention control (the anterior cingulate cortex and the striatum), emotion regulation (multiple prefrontal regions, limbic regions and the striatum) and self-awareness (the insula, medial prefrontal cortex and posterior cingulate cortex and precuneus).

Mindfulness meditation effects on chronic pain



Mindfulness meditation and chronic pain

Mindfulness techniques

- Grounding
 - Showering
 - Brushing your teeth
 - First sip of coffee
- Mindful walking
- Mindful listening

Mindfulness apps

- Insight Timer (70,000 free meditations)
- Headspace *
- 10% Happier *
- Calm
- UCLA's Mindful Awareness Research Center (MARC) free
 - * currently free for healthcare professionals

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