Mindfulness per il dolore

Il protocollo Mindfulness Based Stress Reduction (MBSR)

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Mindfulness: significato

- Il termine **Mindfulness** è la traduzione in inglese della parola "**Sati**" in lingua Pali, che significa "*attenzione consapevole*"
- *L'idiogramma* cinese per "mindfulness" è "**nian**" (念) che è la combinazione di due significati: la parte superiore dell'idiogramma significa "*adesso*", mentre la parte inferiore significa "*cuore*" o "*mente*". Letteralmente l'idiogramma completo indica **l'atto di vivere il momento presente**

Mindfulness: significato

Massachusetts Medical School

MBSR – 8 sedute

- Pratica
- Insegna un metodo
- Non chiede di “riflettere sul passato”
- Non chiede di riflettere sui significati dei comportamenti
- Richiede solo di “fare” con metodicità

Mindfulness: significato

"*porre attenzione in un modo particolare: intenzionalmente, nel momento presente e in modo non giudicante*" (1994, p. 63 Jon Kabat-Zinn, Mindfulness)

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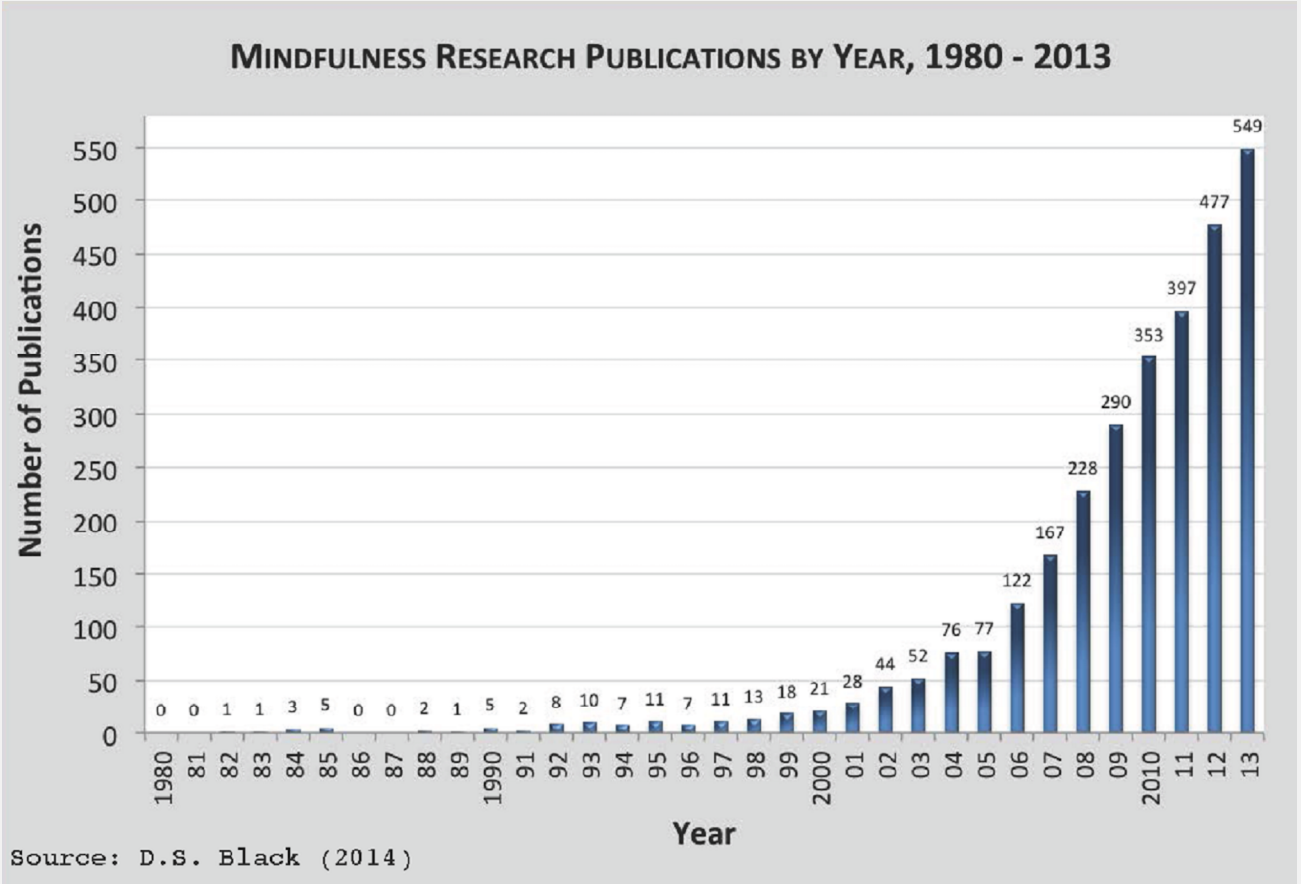
Mindfulness: scientific impact



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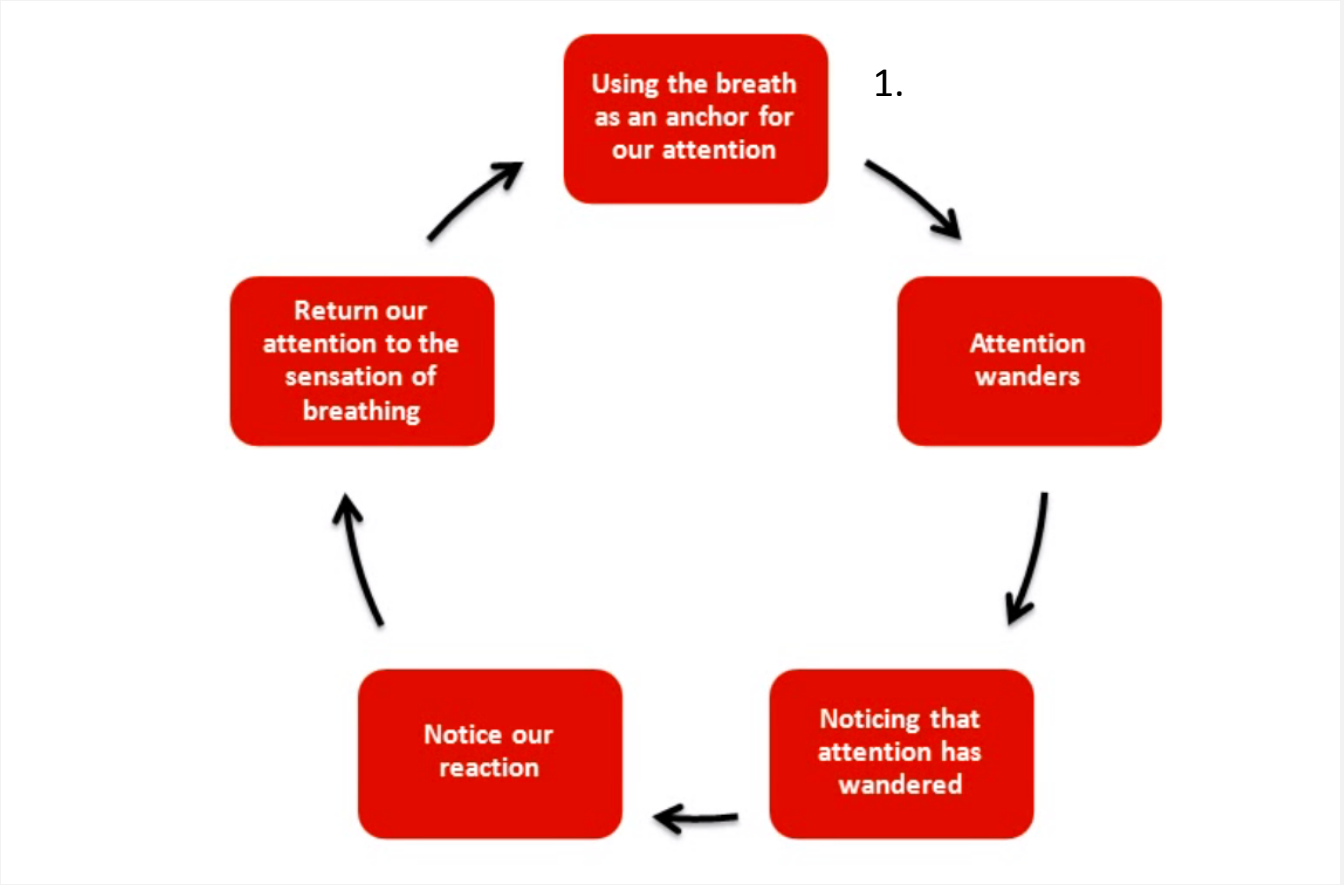
Mindfulness: la pratica

- Mindfulness è una forma di meditazione
- Mindfulness richiede **di prestare, nel momento presente, attenzione a quattro elementi**:
  - il proprio **corpo**,
  - le proprie **percezioni sensoriali** (fisiologiche, fisiche e psicologiche appartenenti agli ampi domini del piacevole, spiacevole, misto e neutro),
  - le **formazioni mentali** (ad es. la rabbia, il dolore o la compassione)
  - gli **oggetti della mente** (ogni formazione mentale ha un oggetto, si è arrabbiati con qualcuno e per qualcosa ecc…)

Mindfulness = Brain Training = Training Attention



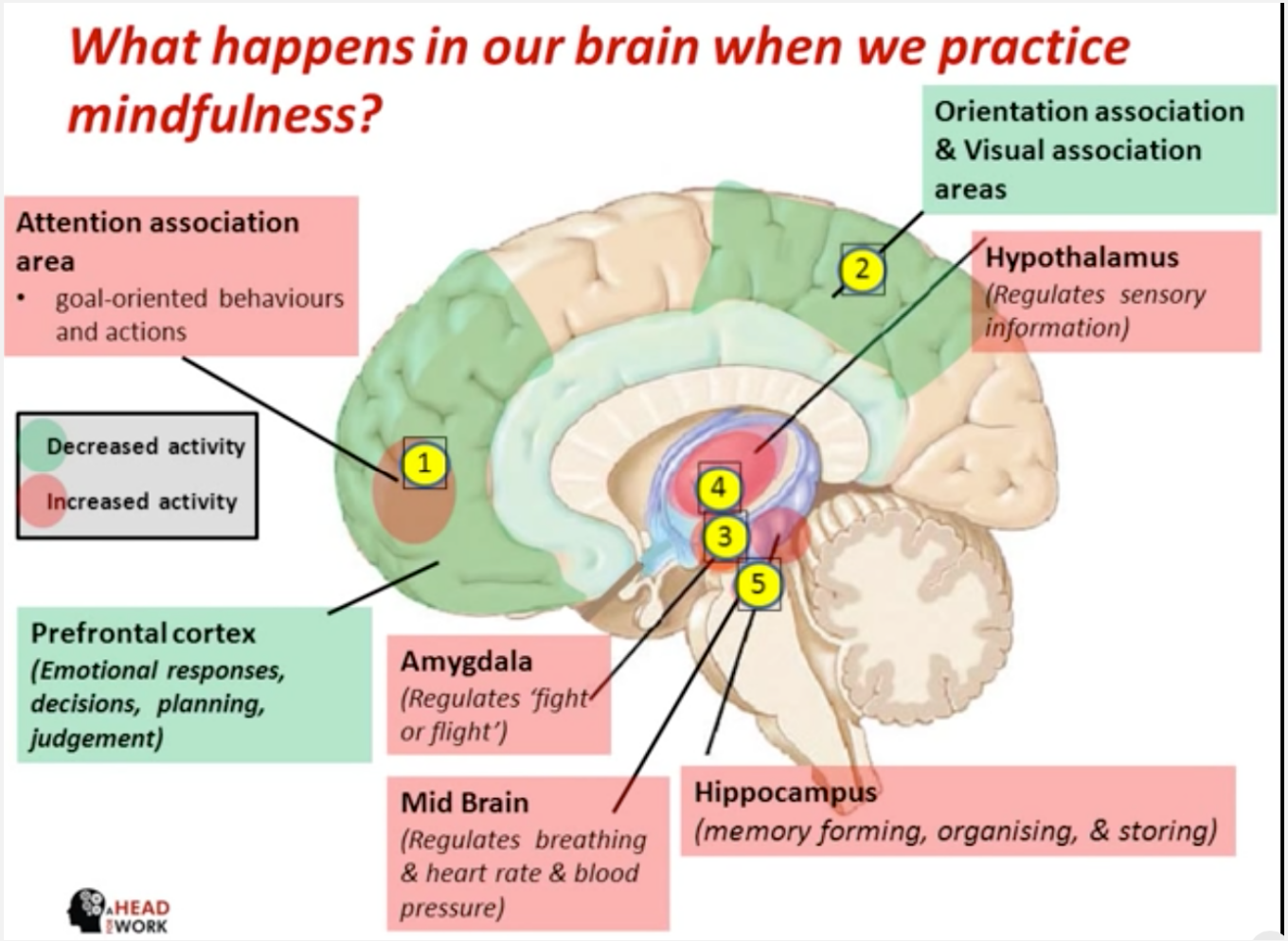
Mindfulness: Mechanism

Table 2. Components Proposed to Describe the Mechanisms Through Which Mindfulness Works

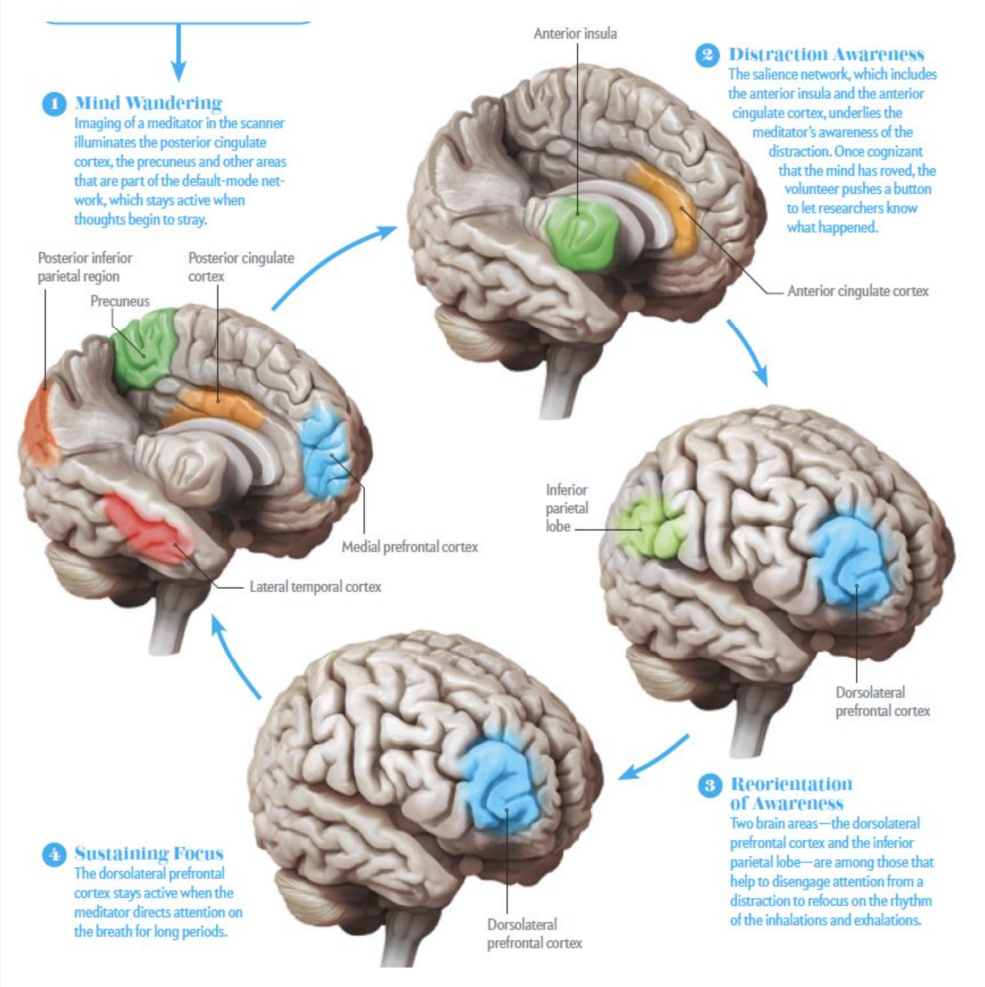
Mechanism	Exemplary instructions	Self-reported and experimental behavioral findings	Associated brain areas
1. Attention regulation	Sustaining attention on the chosen object; whenever distracted, returning attention to the object	Enhanced performance: executive attention (Attention Network Test and Stroop interference), orienting, alerting, diminished attentional blink effect	Anterior cingulate cortex
2. Body awareness	Focus is usually an object of internal experience: sensory experiences of breathing, emotions, or other body sensations	Increased scores on the Observe subscale of the Five Facet Mindfulness Questionnaire; narrative self-reports of enhanced body awareness	Insula, temporo-parietal junction
3.1 Emotion regulation: reappraisal	Approaching ongoing emotional reactions in a different way (nonjudgmentally, with acceptance)	Increases in positive reappraisal (Cognitive Emotion Regulation Questionnaire)	(Dorsal) prefrontal cortex (PFC)
3.2 Emotion regulation: exposure, extinction, and reconsolidation	Exposing oneself to whatever is present in the field of awareness; letting oneself be affected by it; refraining from internal reactivity	Increases in nonreactivity to inner experiences (Five Facet Mindfulness Questionnaire)	Ventro-medial PFC, hippocampus, amygdala
4. Change in perspective on the self	Detachment from identification with a static sense of self	Self-reported changes in self-concept (Tennessee Self-Concept Scale, Temperament and Character Inventory)	Medial PFC, posterior cingulate cortex, insula, temporo-parietal junction

Mindfulness: Brain Mechanism

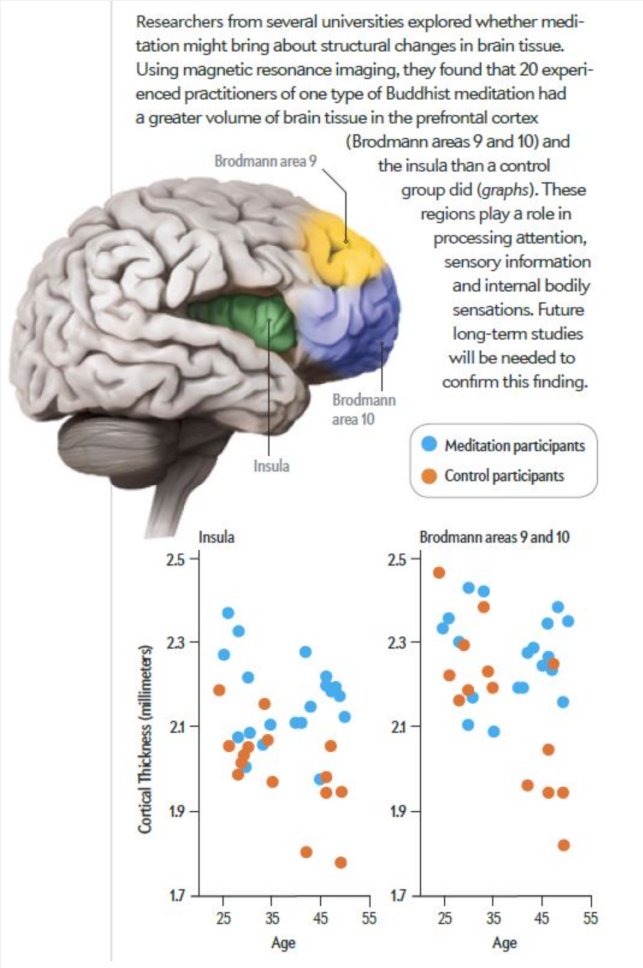
Mindfulness: Brain during Mindfulness



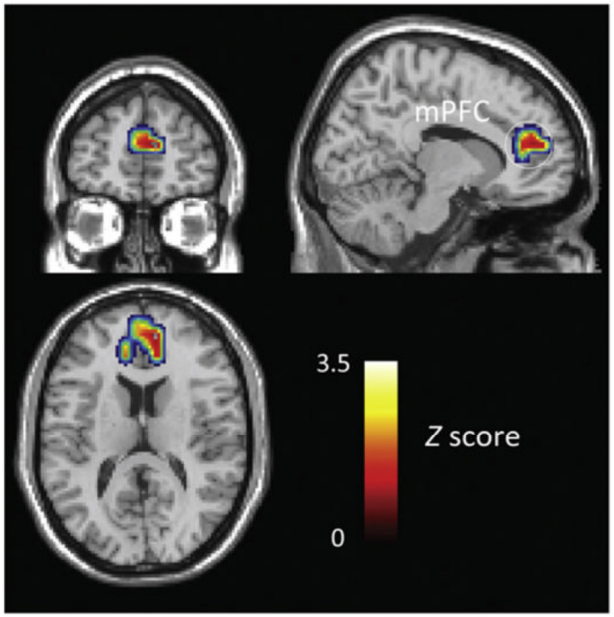
Mindfulness: Brain during Mindfulness



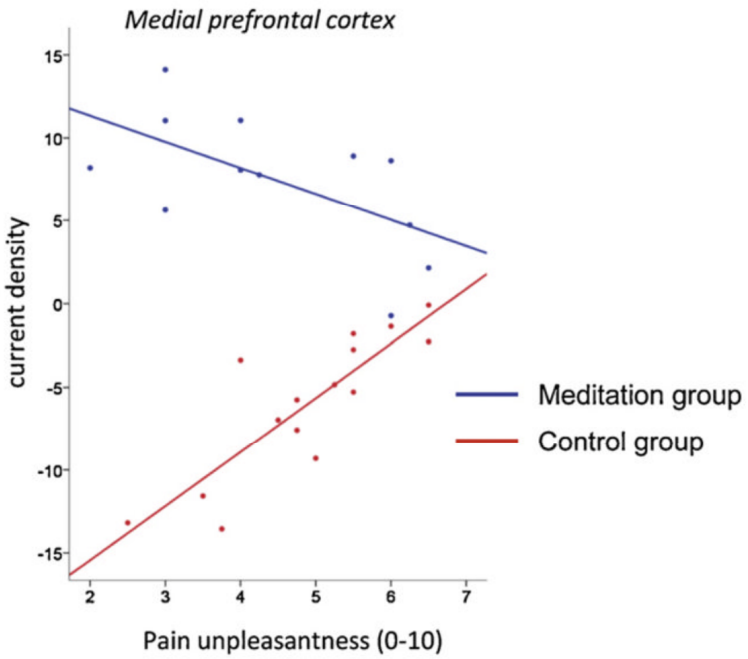
Mindfulness: Brain during Mindfulness



Mindfulness: Pain mechanism

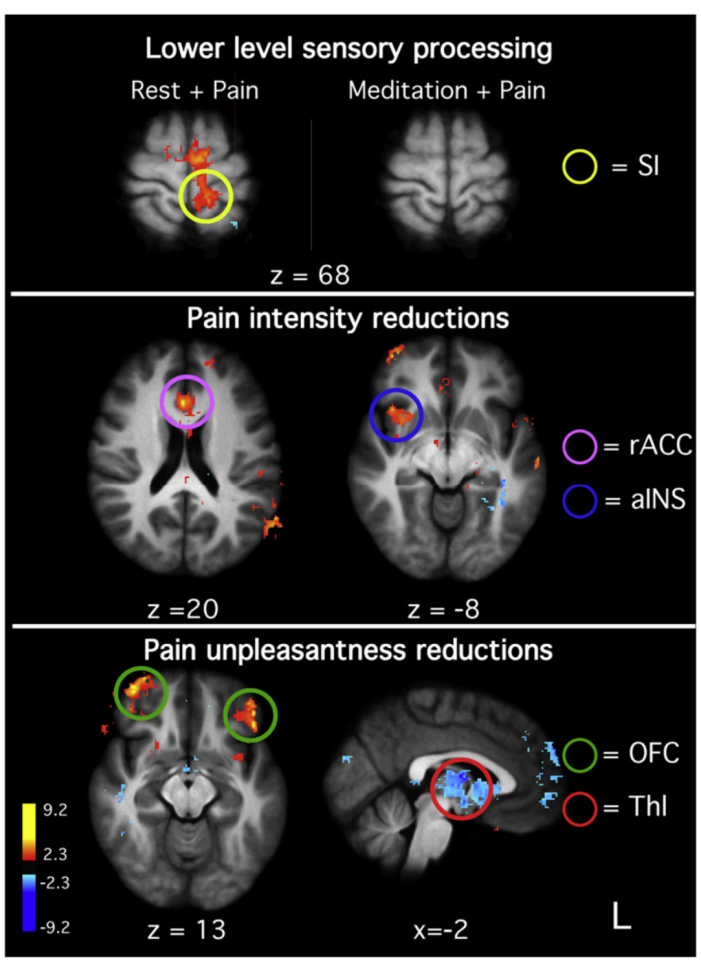


MNI coordinates: X = 11, Y = 52, Z = 15



Inverse correlations of pain unpleasantness with anticipatory neural activity in mPFC/rACC in meditators and controls. In a study comparing neural responses during anticipation of pain between a group with meditation experience and a control group with no meditation experience, a region in mPFC/rACC was more greatly activated in the meditation group, with greater activation predicting reducing pain unpleasantness ratings. In the control group, the opposite correlation was found with overall lower activity.
From Brown and Jones [8].

Mindfulness and Pain Relief: brain mechanism

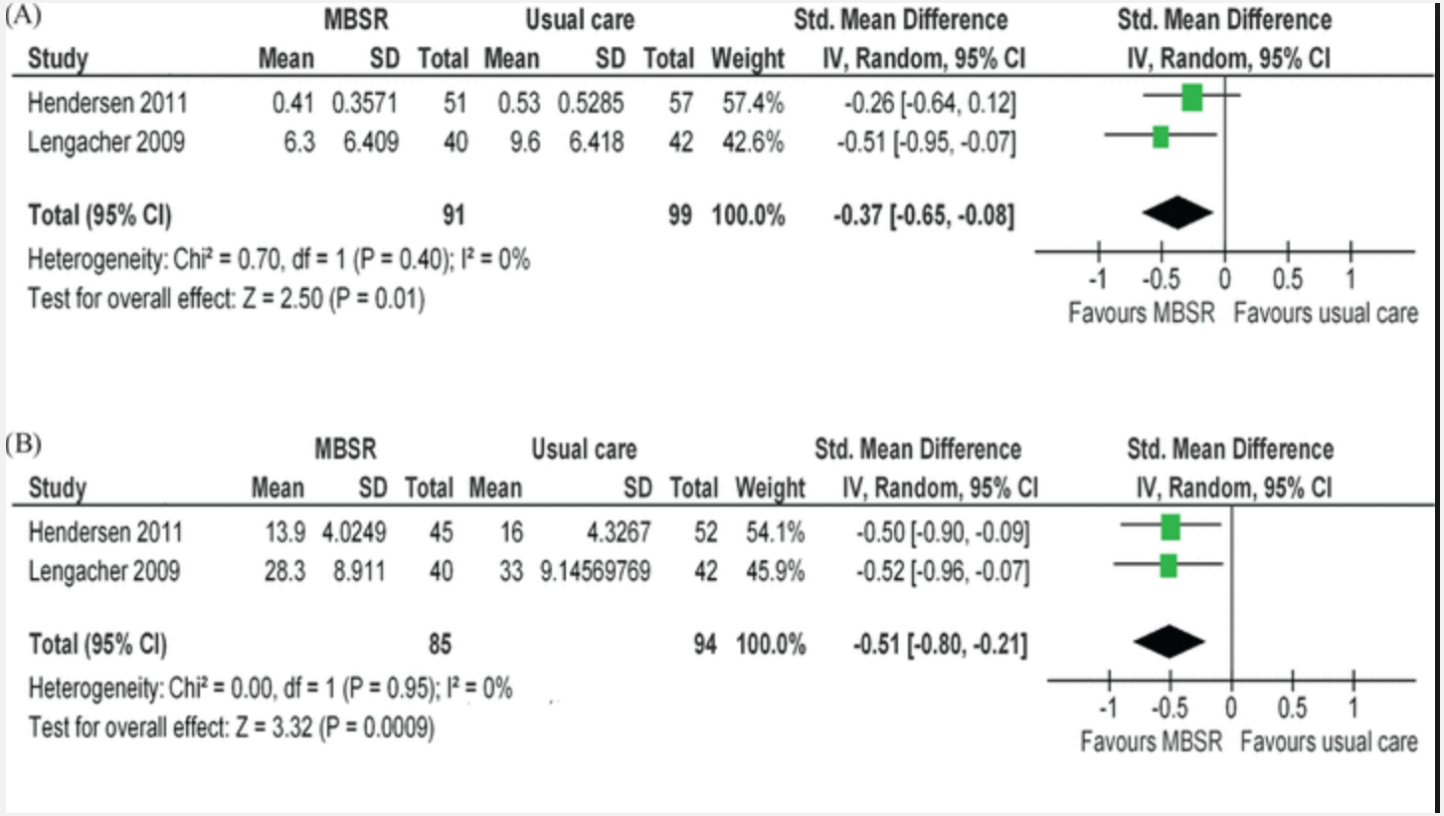


Mindfulness meditation significantly **reduced pain** through a number of brain mechanisms.

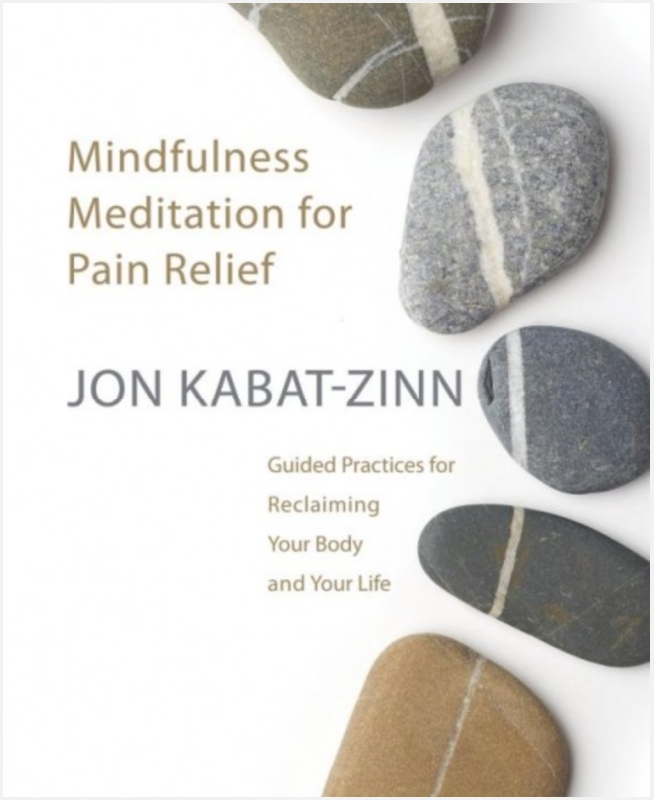
MBSR

- **Reduced level activation in primary somatosensory cortex (SI)** corresponding to the stimulation site (top).
- **Increase activity in the rostral anterior cingulate cortex (rACC)**, an area involved in cognitive control (middle).
- **Greater right anterior insula (aINS) activity (**an area associated with interoceptive awareness).
- **Greater orbitofrontal cortex (OFC) activity** was associated with greater decreases in pain unpleasantness ratings (bottom).
- **Reduction ofthalamic (Thl) activation** was associated with reductions in pain unpleasantness (bottom).

Mindfulness and Pain Relief: Efficacia



Mindfulness and Pain Relief: Conclusione



- E’ un protocollo efficace
- Ha correlati positive a livello cerebrale
- Si combina molto bene con trattamenti farmacologici e con fisioterapia
- È time-limited e focalizzato
- Non richiede di mettere “in discussione la propria vita”
- Si presta a prescrizioni a casa

Grazie per l’attenzione! And Be inspired

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