

# **Mindfulness for Stress Management & Wellness**

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# What is mindfulness?

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*“The awareness that emerges through paying attention on purpose, in the present moment, and non-judgmentally to the unfolding of experience moment to moment.”*

(Kabat-Zinn, 2003)

# Mindfulness Based Stress Reduction (MBSR)

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- Stress reduction clinic at Umass founded in 1979 by Jon Kabat-Zinn
- 8 weekly 2 ½ hour classes and a single 6 hour retreat
- Classroom format with guided practice and group discussion

# Mindfulness practices

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Formal  
meditation  
practices

Awareness of everyday activities

# How is mindfulness different than relaxation techniques?

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- Not trying to produce a special state
- Greater awareness of the mind as it is in the present moment
- Applicable to any situation

# Health benefits

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- Increased awareness:
  - Mind and body
  - Thoughts as passing events and conditioned
  - Relationship between thoughts and emotions
- Leads to decreased:
  - Automatic reactions
  - Stress

# Clinical research

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- MBSR effective for chronic pain, anxiety, depression, and other complaints
- Reduced psychological stress, increased well-being
- Reduced physiologic response to stress

# Mindfulness-based approach to wellness

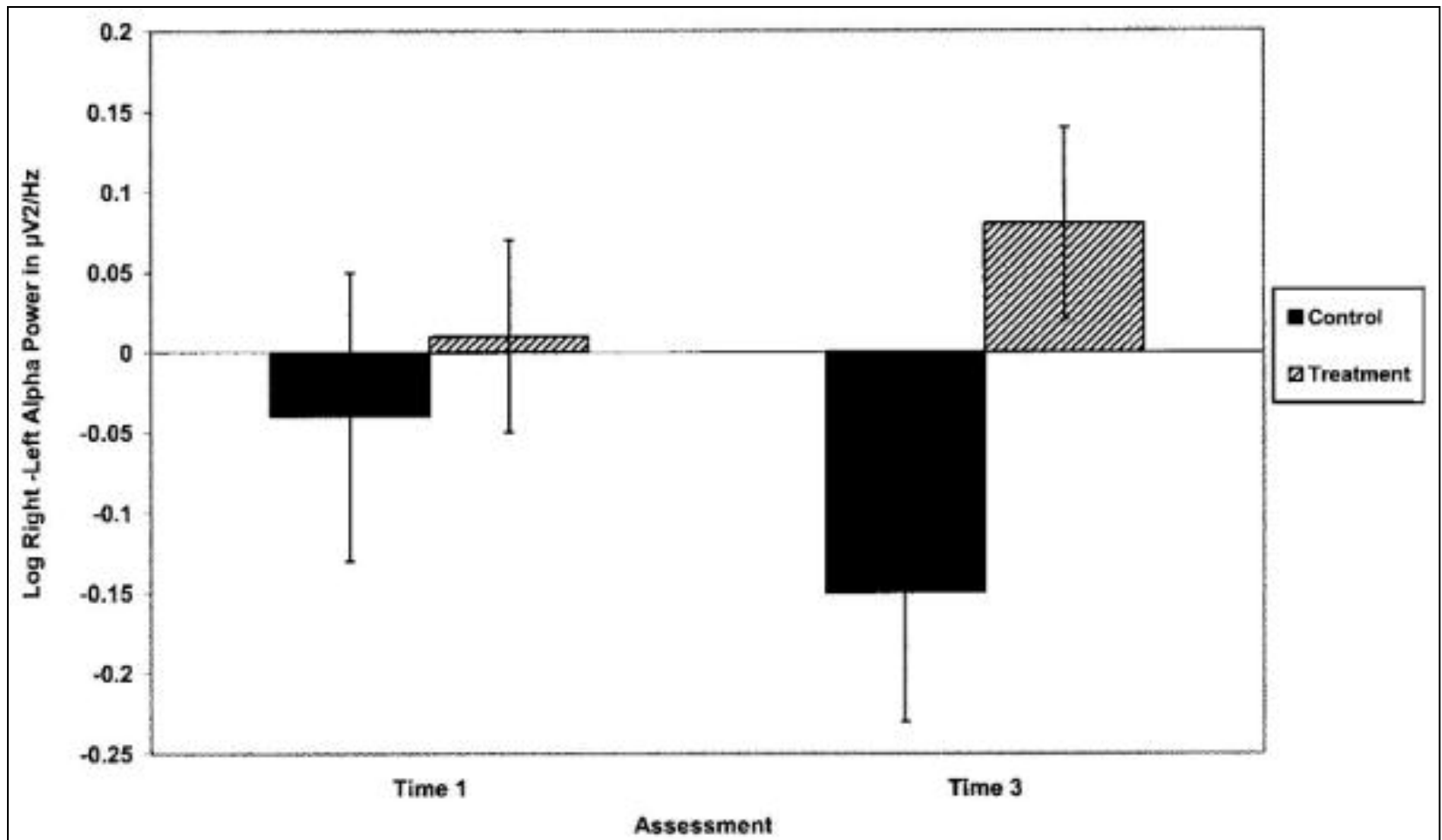
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- Holistic – physical, mental and spiritual
- Strength-based – vast potential of inner resources to promote one's own well-being
- Supports a “culture of wellness” for all stakeholders involved in the person-centered planning partnership

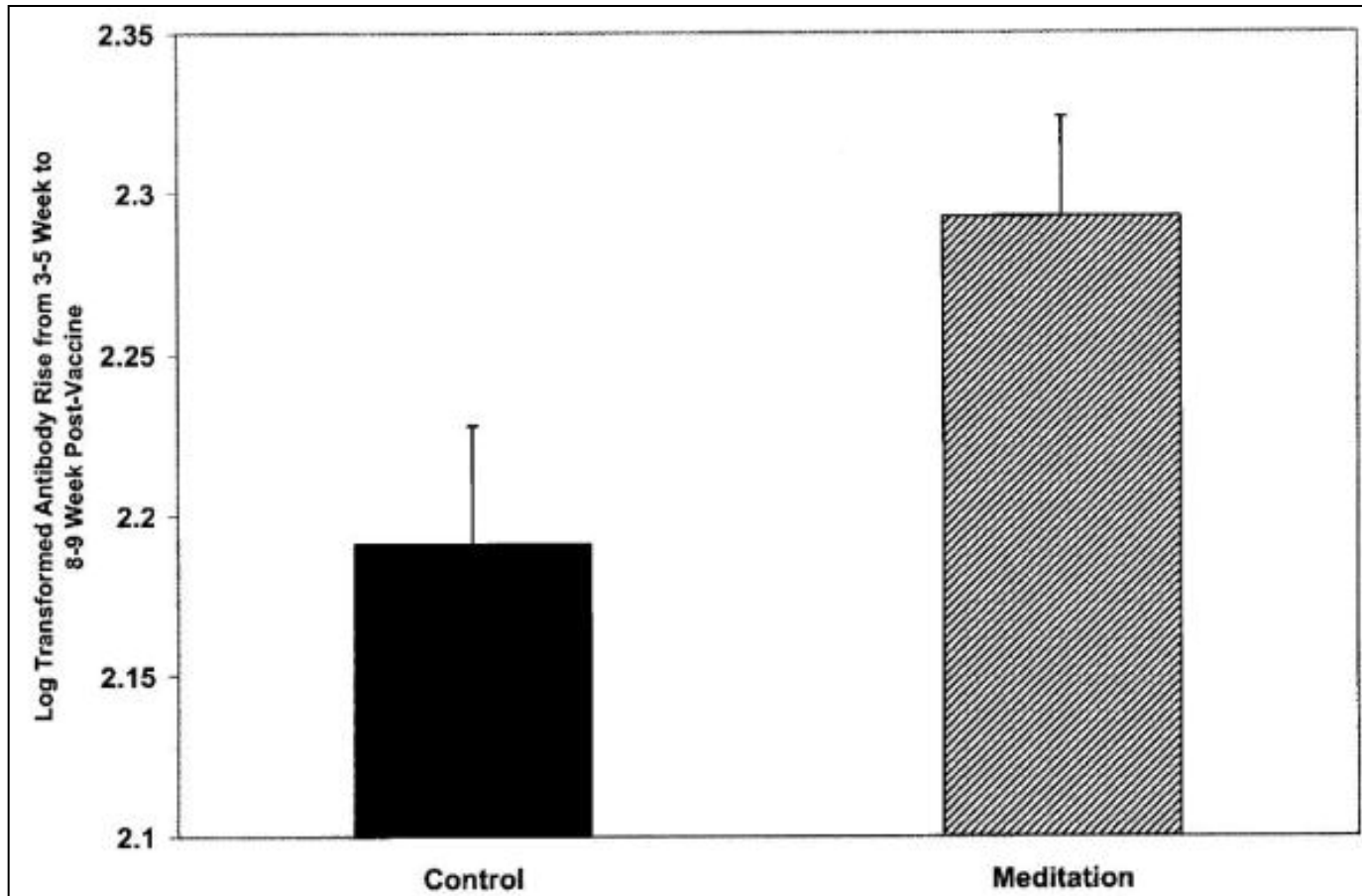


# **MINDFULNESS-INDUCED NEUROPLASTICITY**

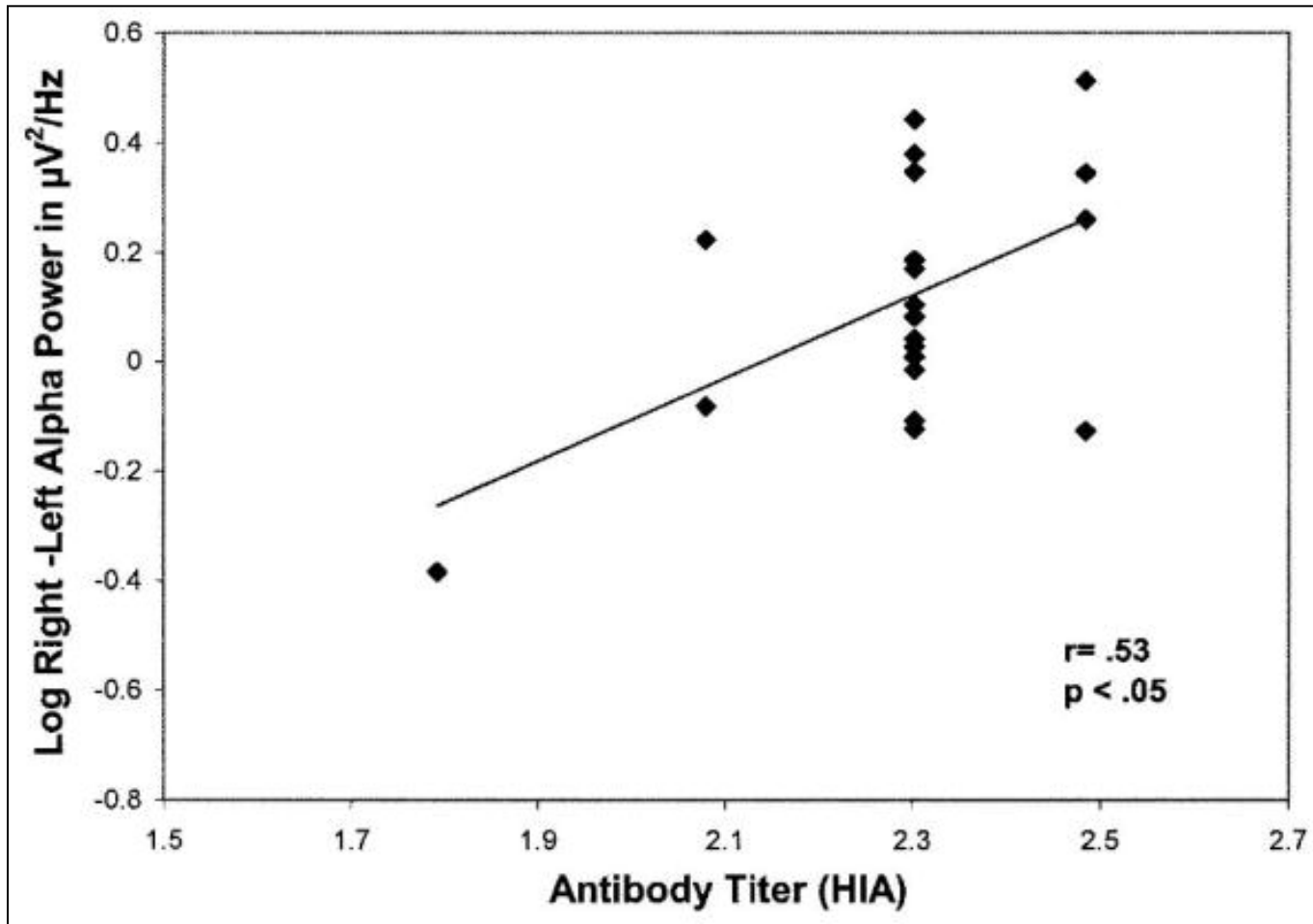
# MBSR increases left-sided cortical activation



# Increased immune response



# Immune changes correlate with shift in prefrontal activation



# **MINDFULNESS FOR STAFF**

# Westborough Adolescent Unit

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Comments from focus group:

- things that upset me before I gain perspective about a lot quicker
- class helped me validate my purpose in this work
- this class helped me see my work as a process and not a series of deadlines

## After the class, did you feel more or less:

Physical or emotional energy?

Prone to negative thinking about your job?

Irritated by small problems, by co-workers and/or patients?

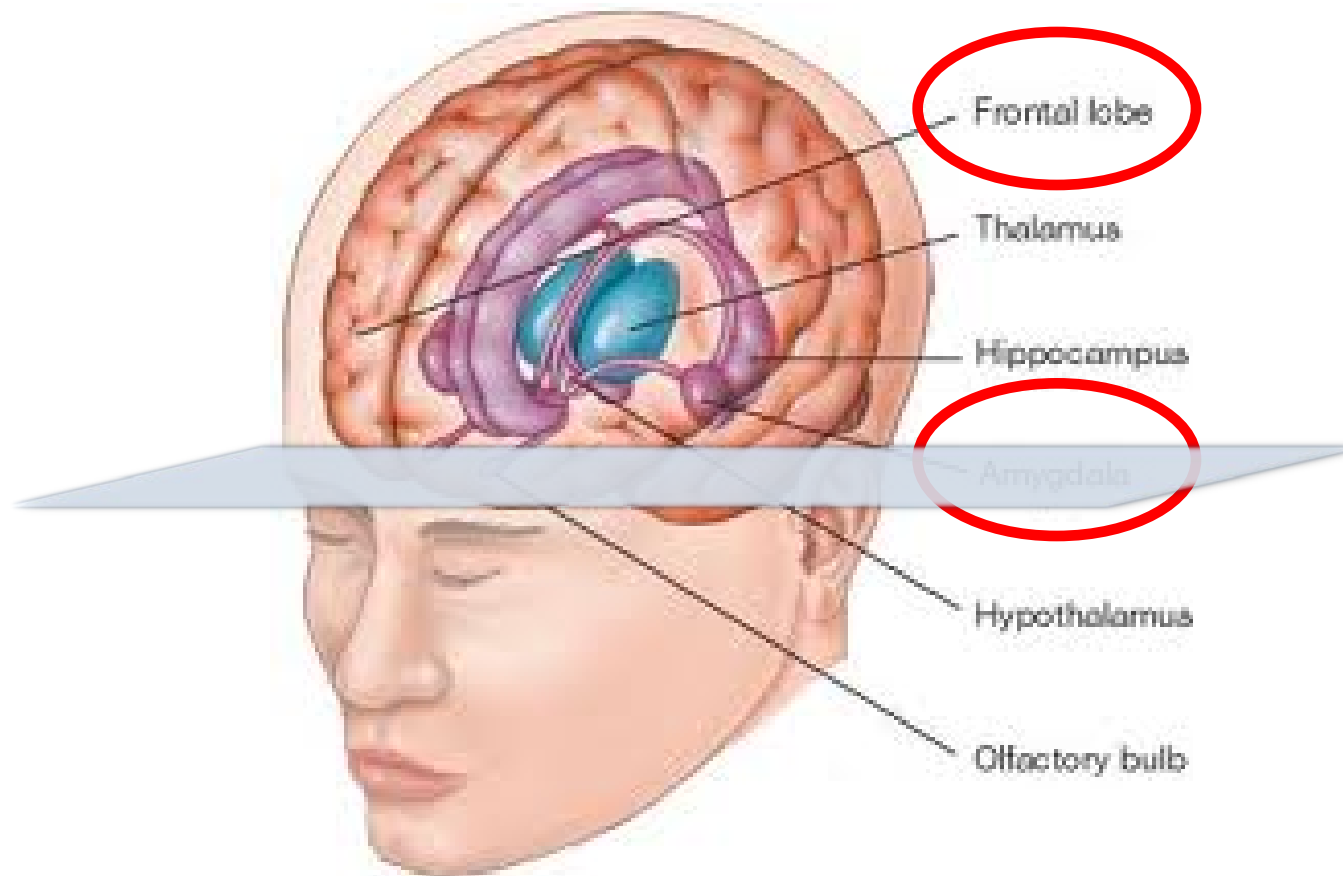
Frustrated with parts of your job?

Role	Pos	Neg	No change
RN	100%		
Counselor	13%	25%	63%
Admin Asst/Human Rights officer	50%		50%
Program Director	50%		50%
Program Director	100%		

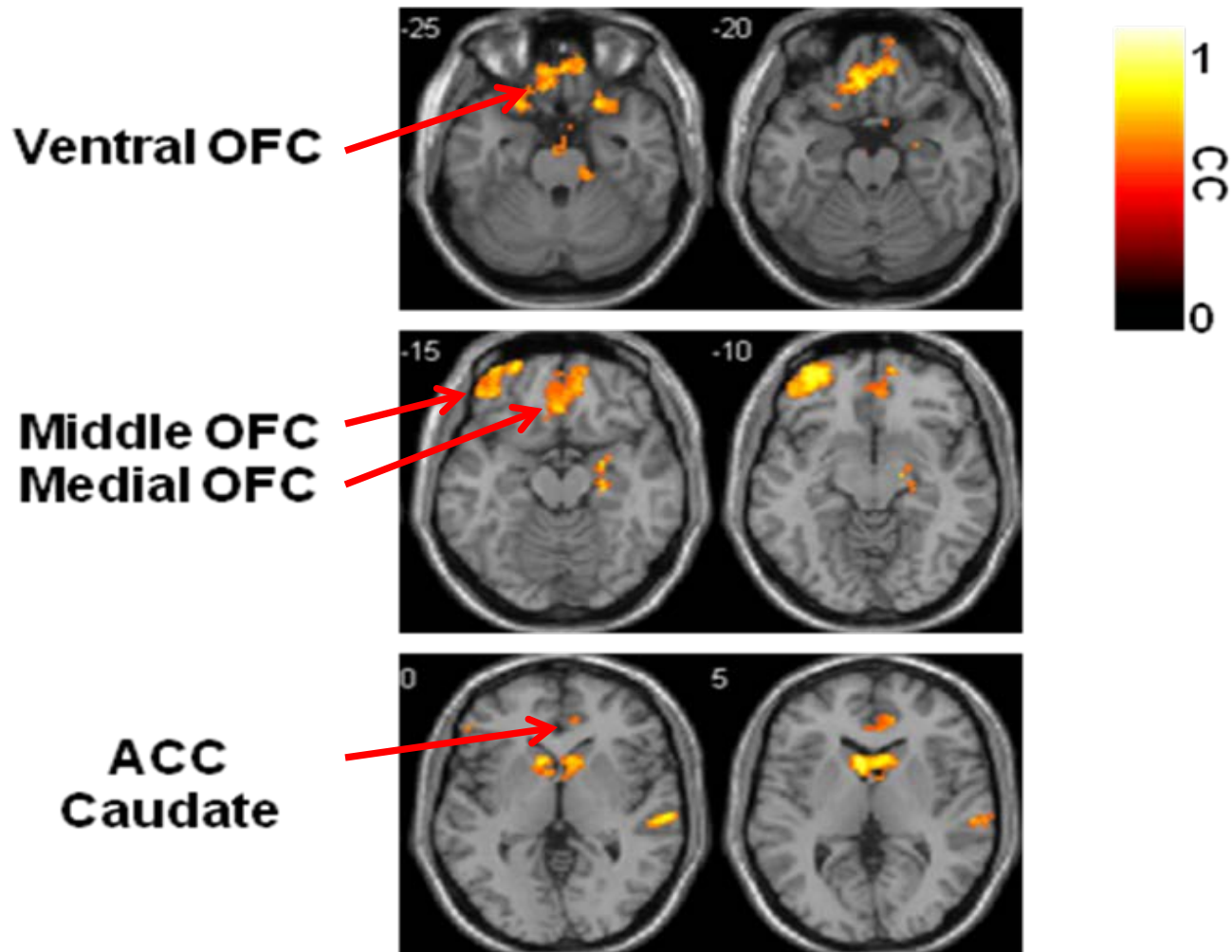
# **CHANGES IN NEURAL CIRCUITRY**



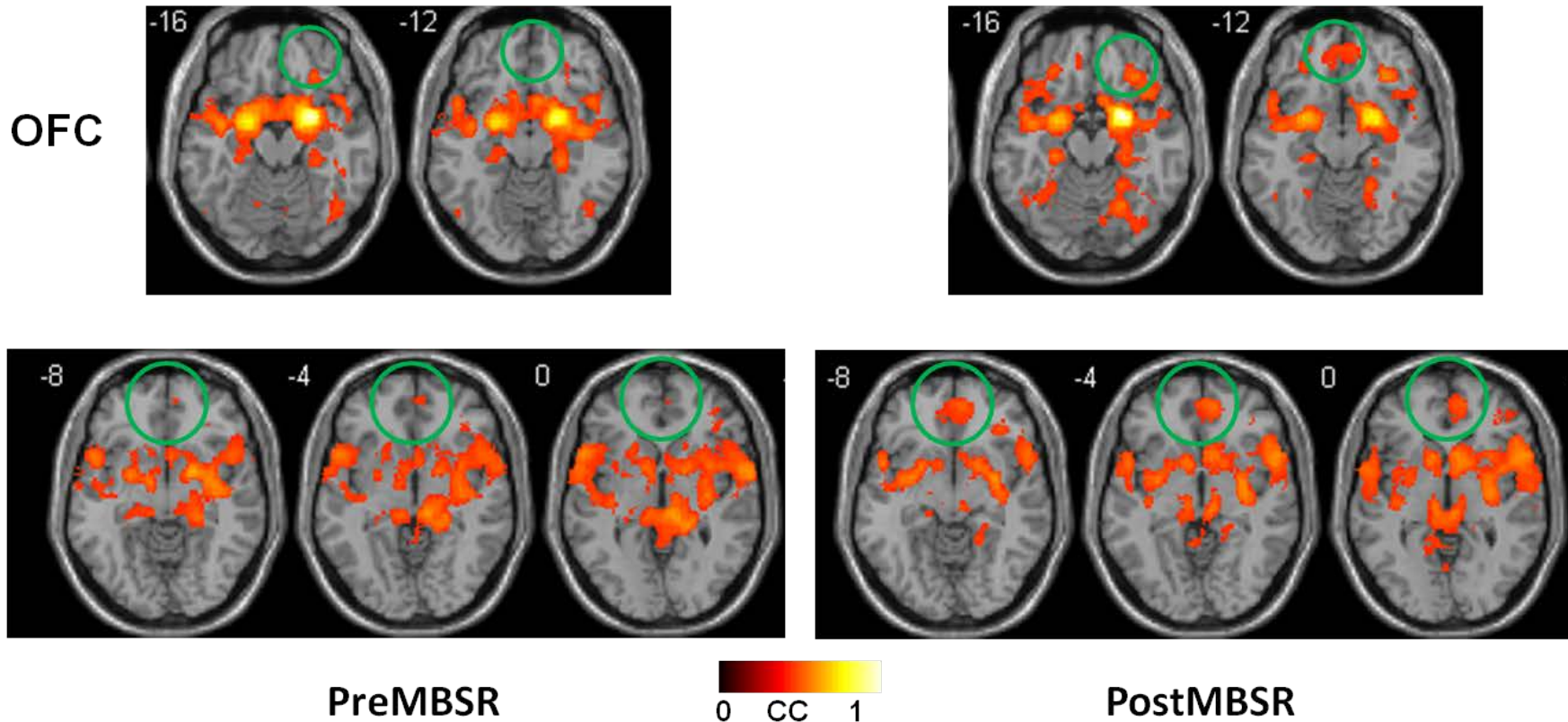
# Limbic system



# Amygdala connectivity correlates with mindfulness



# MBSR changes amygdala connectivity



# Stress response and wellness

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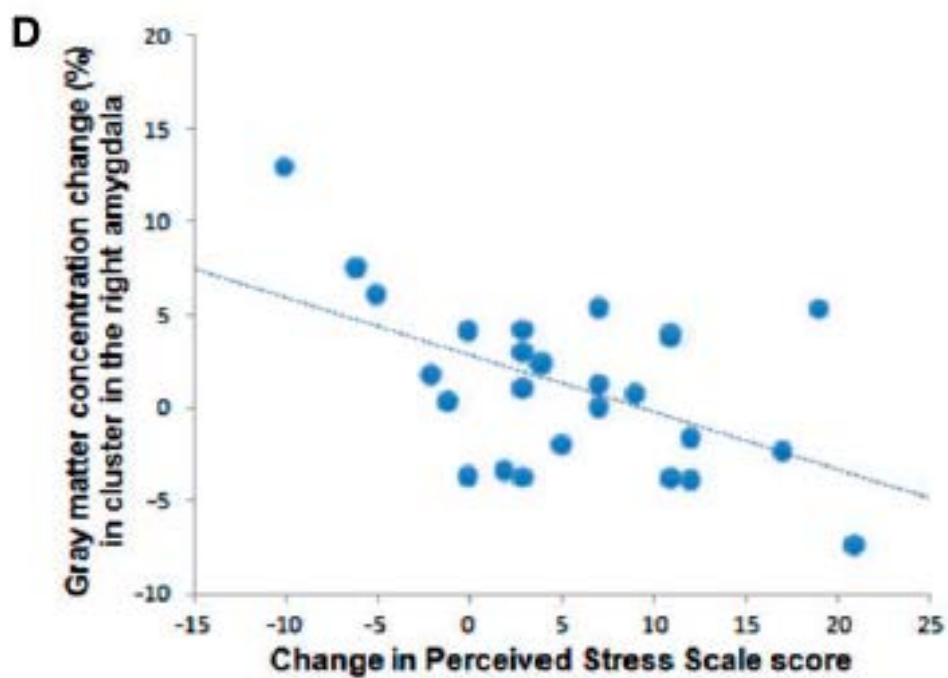
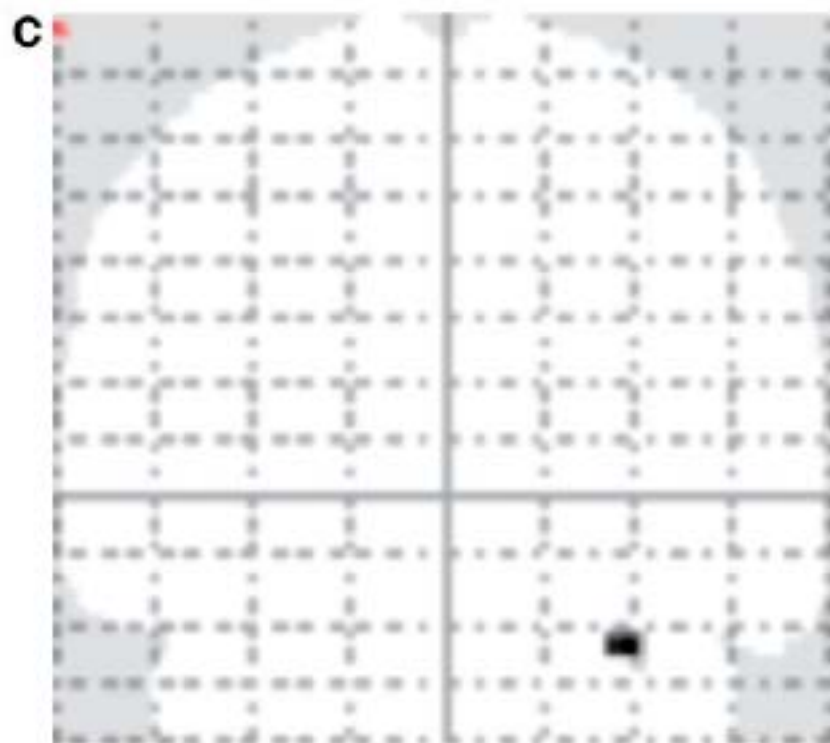
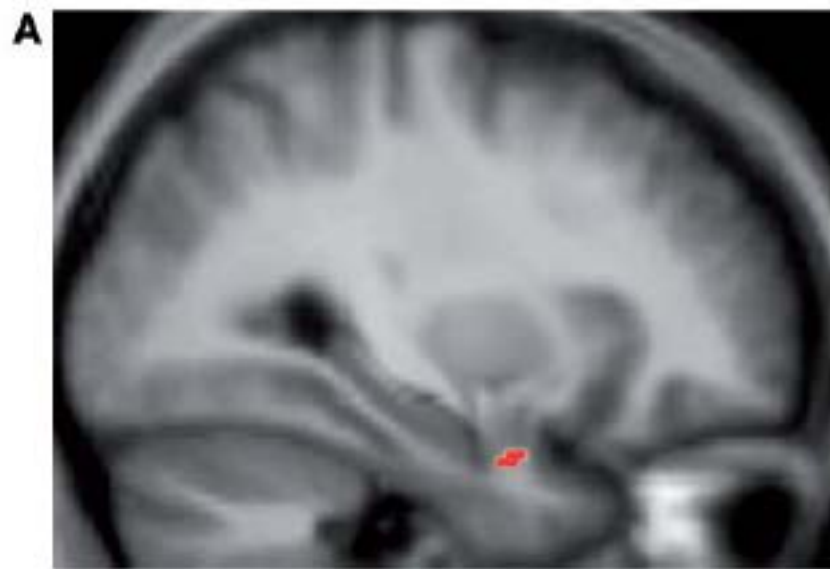
- Amygdala is the fight or flight center
- Activation triggers cascade of neural, neuroendocrine, neuroimmune and behavioral responses
- Chronic activation of this circuitry responsible for effects of stress on health outcomes

# **Stress reduction correlates with structural changes in the amygdala**

**Britta K. Hölzel,<sup>1,2</sup> James Carmody,<sup>3</sup> Karleyton C. Evans,<sup>1</sup> Elizabeth A. Hoge,<sup>4</sup> Jeffery A. Dusek,<sup>5,6</sup> Lucas Morgan,<sup>1</sup> Roger K. Pitman,<sup>1</sup> and Sara W. Lazar<sup>1</sup>**

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# Mindfulness-based treatments: anxiety and depression

Effect sizes showed MBI's were moderately effective

	Effect Size	
	<u>Anxiety</u>	<u>Depression</u>
All studies	.63	.59
Specific populations	.97	.93

Hoffman et al. 2010

# Depression treatment & relapse

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- Treatment guidelines recommend antidepressant treatment for 6-12 mos. beyond remission of symptoms, but often not followed or patients stop treatment
- Majority of patients have incomplete response, non-response, recurrence, or drop out of treatment
- With each recurrence likelihood of future recurrence increases



# MBCT

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- Segal, Williams, Teasdale research on depression relapse:
  - *Cognitive reactivity* to sad moods was a predictor of recurrence
  - With each recurrence, milder sadness and ruminative thinking could trigger recurrence

# MBCT

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- Format similar to MBSR :
  - 8-week classes of 2.5 hrs/wk,
  - Participatory psychoeducational group
  - Classroom and home practice, 1-day retreat
  - Mindfulness practices

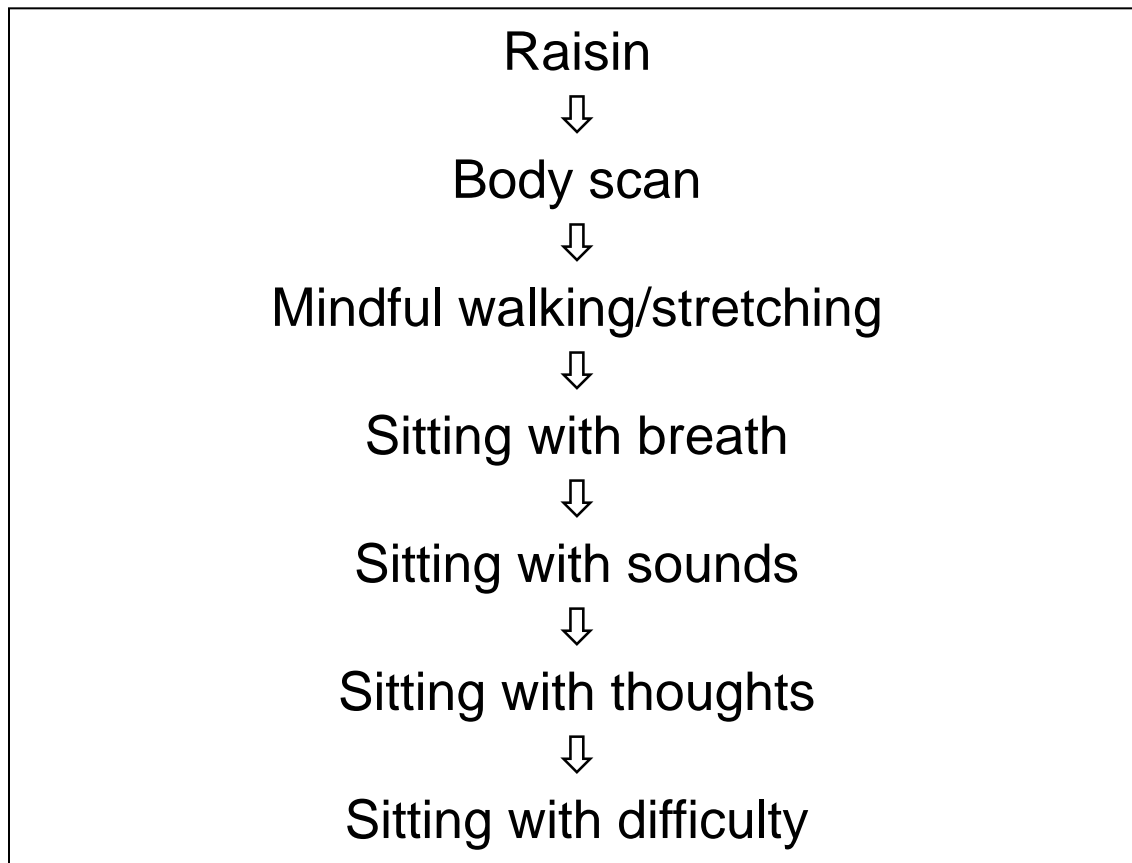
# MBCT

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- Adaptations
  - ↑ emphasis on cognitions – decentering, seeing thoughts as passing mental events, how they influence feelings and behaviors
  - Explicit instructions to practice acceptance rather than judgment or avoidance
  - Classroom discussion focus on depression rather than stress or pain

# MBCT

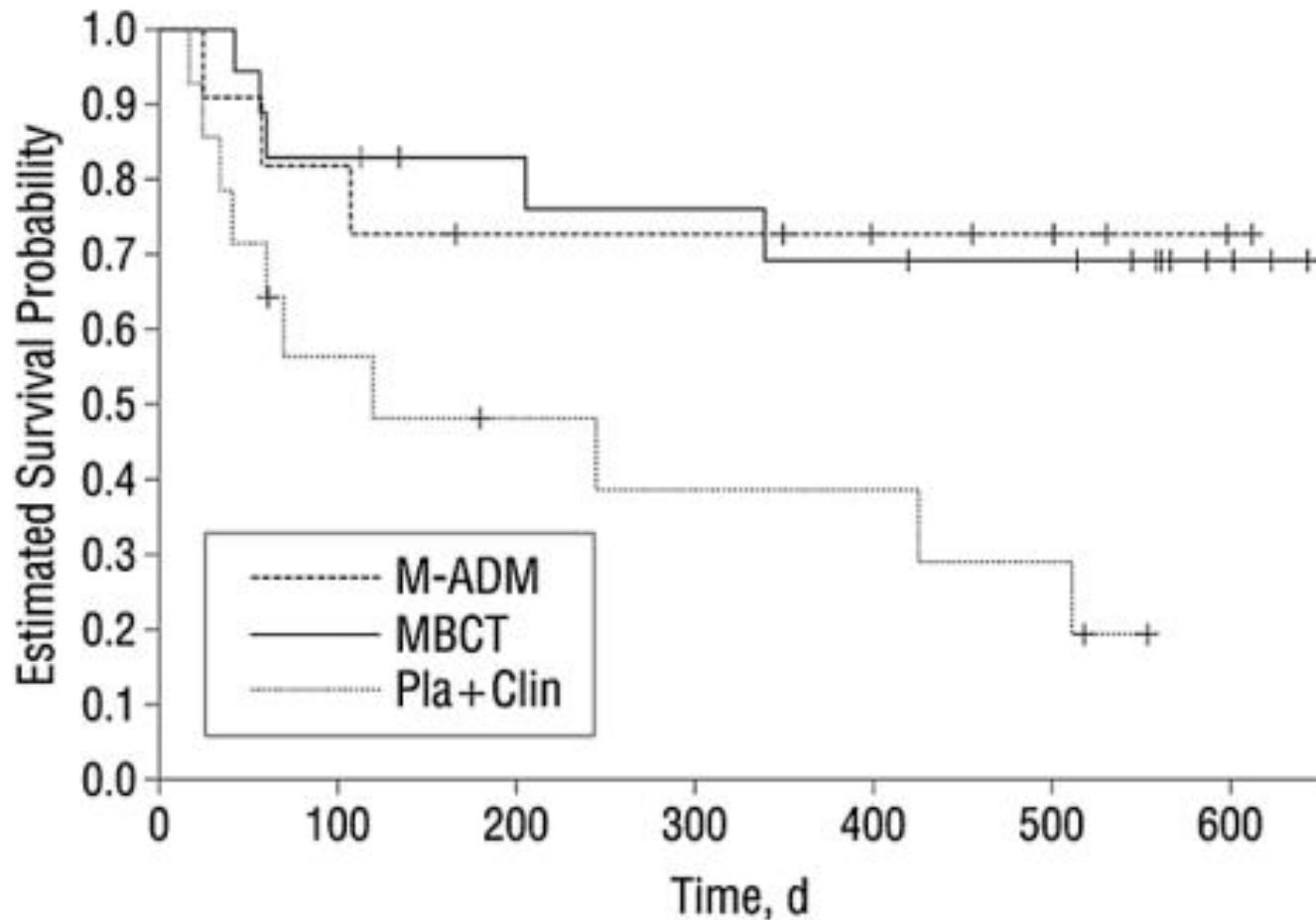
Developing ability to directly experience difficulties



# Segal, et al 2010

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- Maintenance phase assigned to 1 of 3 study conditions:
  - M-ADM
  - MBCT + ADM taper
  - Pla + Clin
- 18 month follow-up



- No difference between MBCT and M-ADM in recurrence
- Evidence-based practice
- UK's National Practice Guidelines for Depression

# Wellness

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- Chronic or repeated activation of the stress response leads to health problems and reduces quality of life
- Wellness involves self-knowledge and self-education about one's health and active engagement in activities to promote health
- Improved emotional well-being and quality of life

# Wellness

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- Learning to pay attention and be present with experience –
  - Decreases automatic reactions and stress
  - Encourages health-promoting behavior changes – informed exercise, nutritional awareness, and improved sleep
  - Promotes changes in unhealthy behaviors – smoking, emotional eating, and alcohol/drug use



# Mindfulness-based approach to wellness

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- Holistic – physical, mental and spiritual
- Strength-based –inner resources to promote one's own well-being
- Participatory – consistent with person-centered planning partnership in supporting a “culture of wellness” for all stakeholders

# References

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Questions:

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