



Work Smarter, Stress Less, Be Mindful

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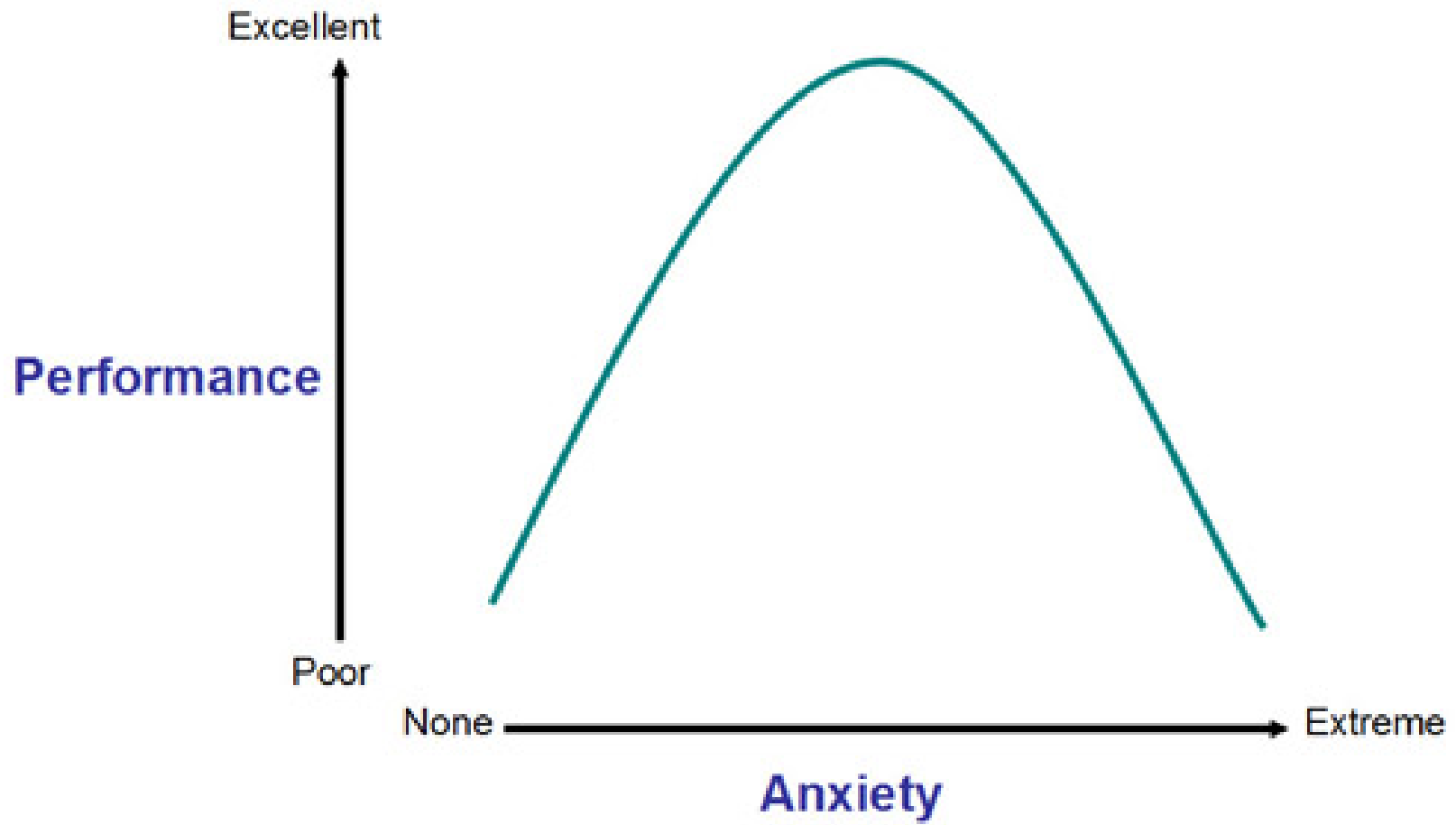


Today's Agenda

- The power of stress resilience
- The power of full engagement
- The power of mindfulness

Arrows In, Arrows Out

Relationship between Anxiety & Performance



The Healthy Mind Platter



The Healthy Mind Platter, for Optimal Brain Matter

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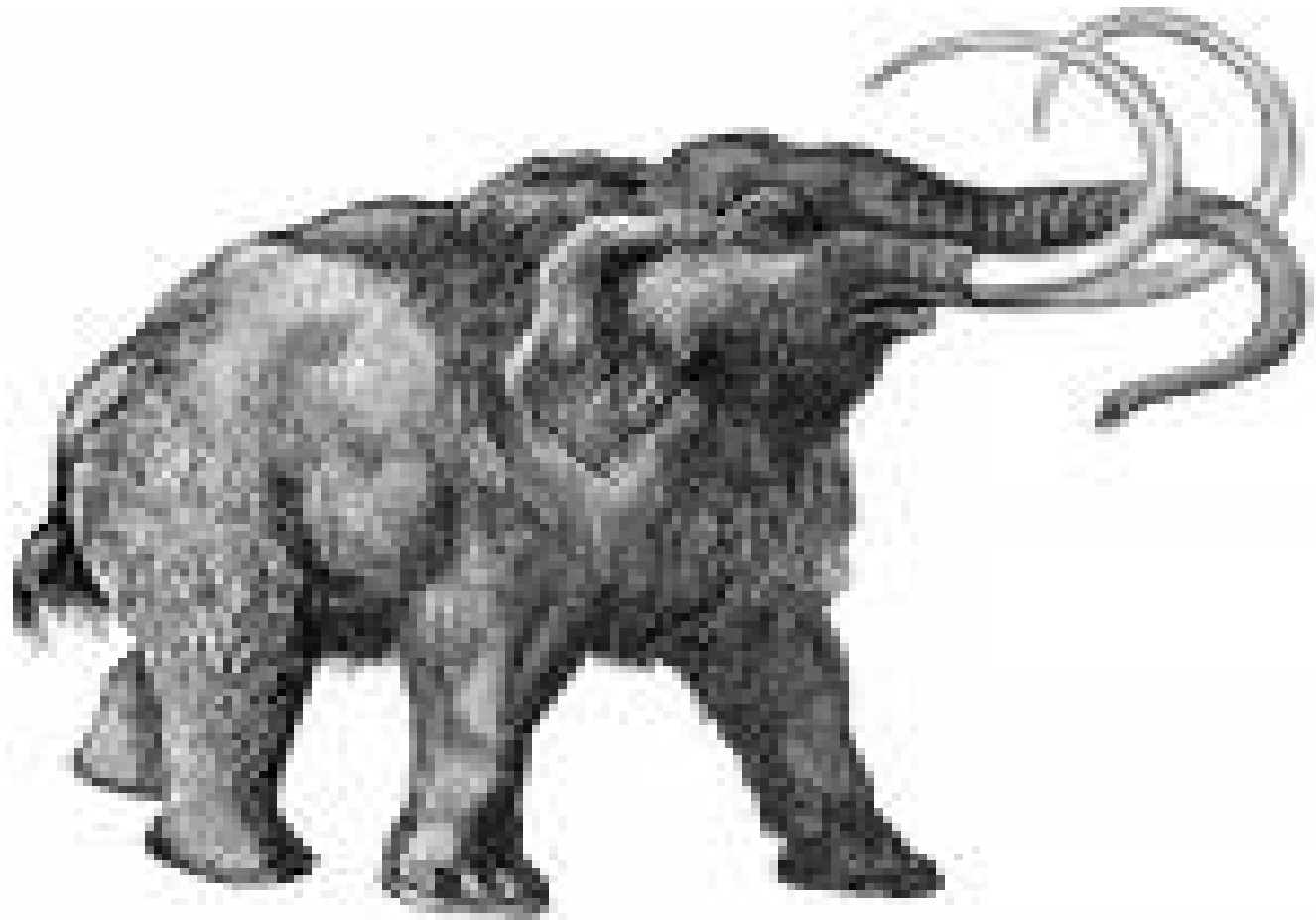
Stress Resilience





Stress Response: “Fight, Flight, Freeze”

- Every time your body triggers the fight, flight, freeze response, every system of your body mobilizes for action.
- You are bathed in stress hormones (cortisol, epinephrine, norepinephrine are released).
- Most of our daily stress responses are “false alarms.”





Too many false alarms

- Circulatory problems - chronic HBP
- Immune system problems - sick all the time
- Digestive problems
- Migraines and other headaches
- Reproductive issues
- Insomnia, depression, anxiety
- Chronic pain

Internalized Fight, Flight, Freeze

- **Fight**

- Self-criticism

- **Flight**

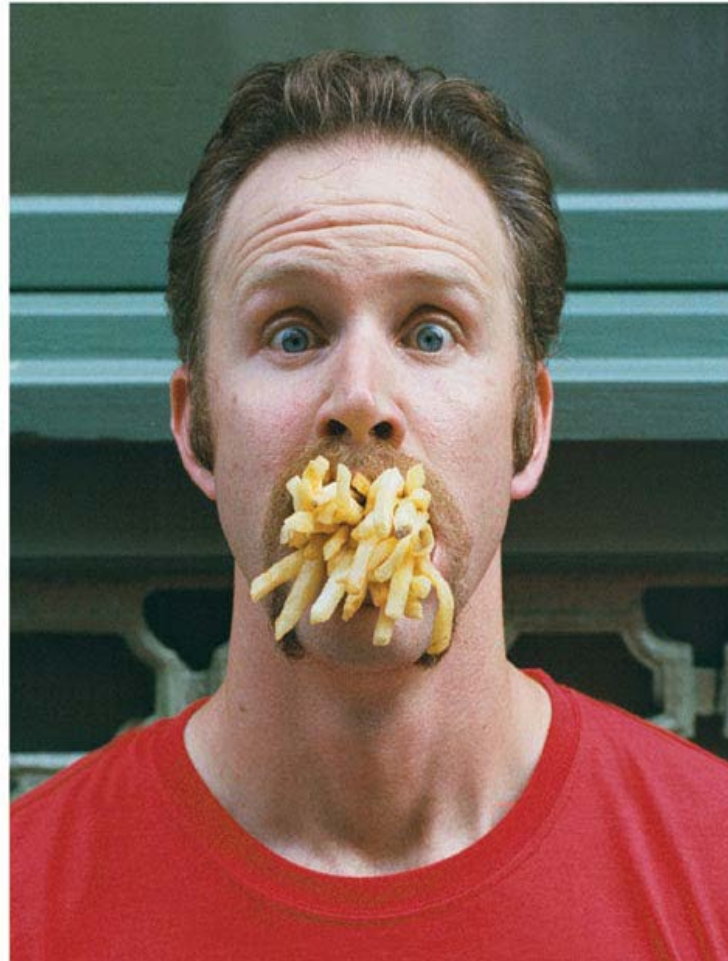
- Escapism, numbing out

- **Freeze**

- Helpless, hopeless, stuck

Adapted from Christopher Germer, Ph.D., *The Mindful Path to Self-Compassion*

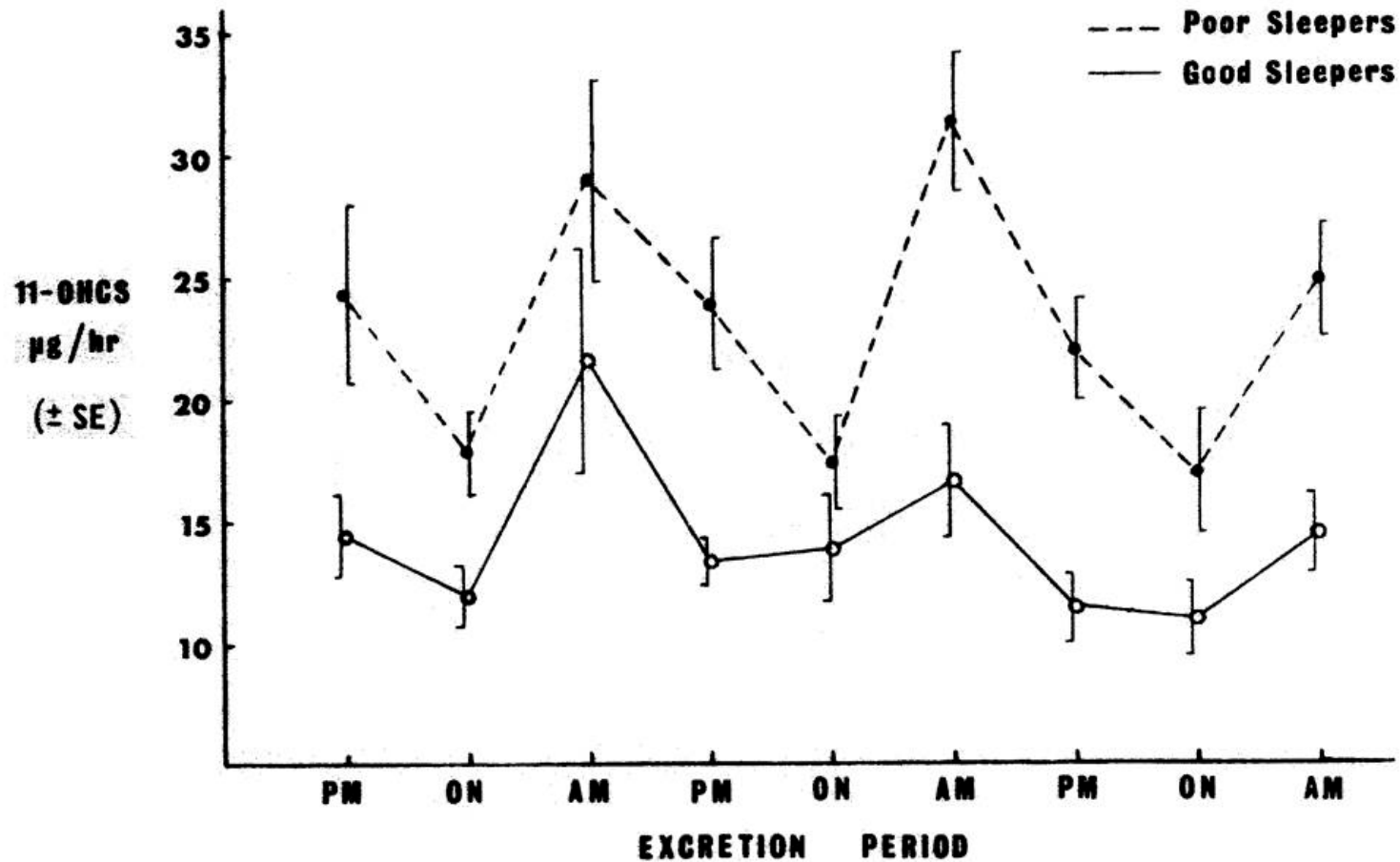
Effects of Cortisol



Effects of Cortisol

- Sleep disturbance
- Increased blood sugar
- Increased fat storage
- Increased appetite - even if you are not performing more physical activity - and cravings for “comfort food”

Cortisol secretion



Johns, MW et al. (1971) *Psychosomatic Medicine*

Reality check

- Less than 5% of the population has a genetic mutation allowing them to function normally on 6 hours of sleep per night.

He, Y. et al. (2009) *Science*

Decrease Cortisol

What decreases cortisol levels?

- Mindfulness meditation (UC Davis Center for Mind and Brain, 2013)
- Massage
- Appropriate exercise for your conditioning level
- Music and regular dancing
- Yoga
- Laughter and humor
- Stand like Wonder Woman for 2 minutes

Recap: stress resilience

- Overstress is bad for performance
- Meditation is not “wasted time”
- It helps create the physiological foundation of stress resilience

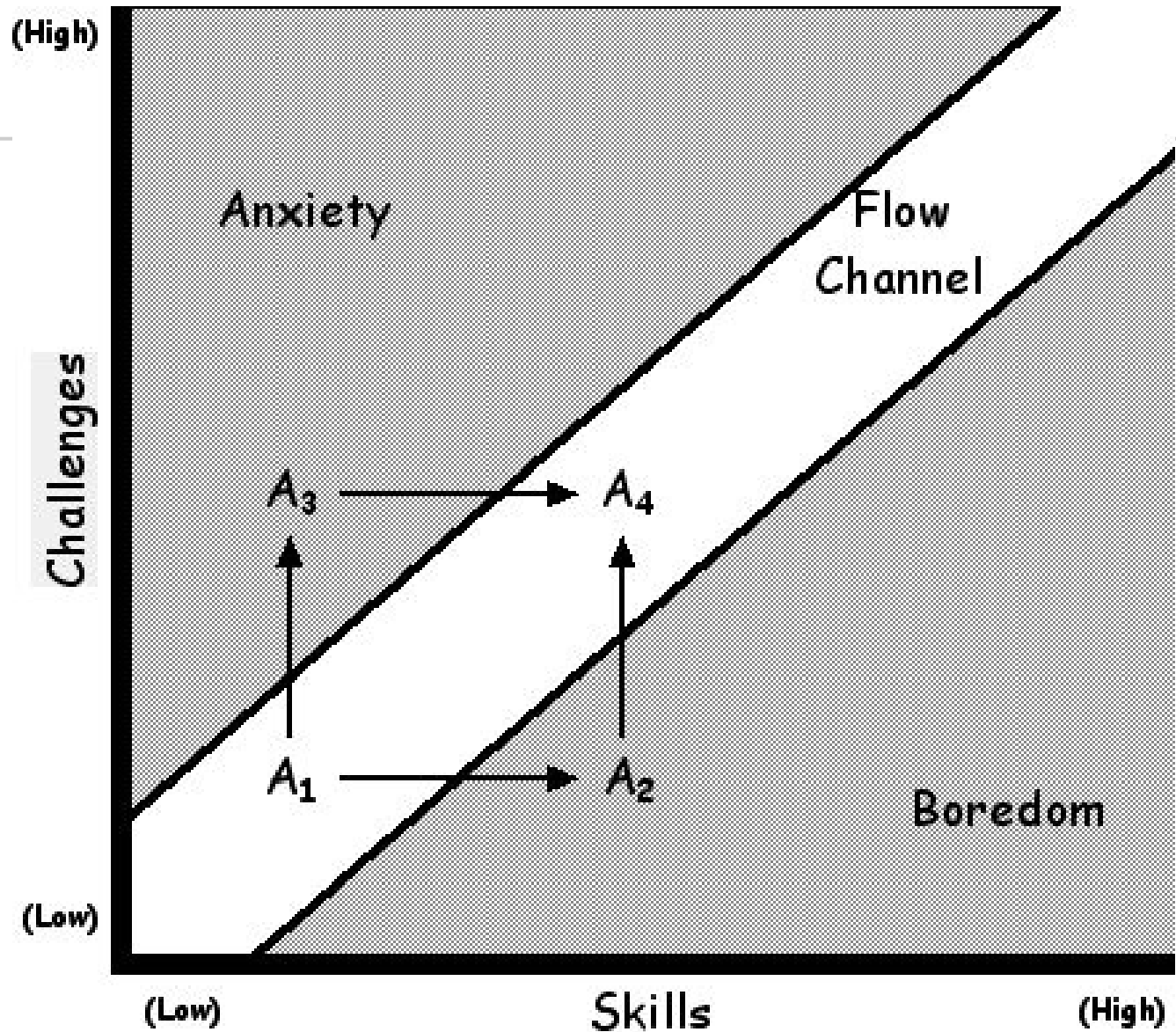
The Power of Full Engagement



What Matters Most?

- Looking back on their lives, elders report on what they value most.

Flow



From Flow: The Psychology of Optimal Experience
by Mihaly Csikszentmihalyi (page 74)

Flow: The Psychology of Optimal Experience

Nakamura and Csíkszentmihályi:

1. *intense and focused concentration* on the present moment
2. *merging of action and awareness*
3. a *loss of reflective self-consciousness*

**How do we cultivate relaxed,
high-quality attention?**

The Power of Mindfulness



Mindfulness Benefits

- Increased focus and concentration
- Improved sleep
- Reduction in anxiety and depression
- Greater sense of well-being
- Enhanced immune function
- Stronger ability to cope with everyday stress

Cognitive control

- Delay of gratification
- Impulse management
- Emotional self-regulation
- Suppression of irrelevant thoughts
- Paying attention or learning readiness



Goleman, D. *The New York Times*, May 14, 2014



Lazar, et al. 2015

ACC

- self-regulation: ability to purposefully direct attention and behavior;
- suppress knee-jerk responses;
- switch strategies flexibly;
- learn from past experience to support optimal decision-making.

Hippocampus

- key structure for resilience;
- covered in receptors for cortisol and can be damaged by chronic stress;
- smaller hippocampus associated with PTSD and depression.

Resources @ MIT

- 617/253-CALM (2256): The MIT Sleep and Relaxation Line
- Relaxation and meditation podcasts
- Wellness classes - Yoga, Tai Chi, MBSR
- Meditation for Your Wellbeing - 2nd Wednesdays 12:10-12:40 pm

mit.edu/wellness

- Weekly Relaxation - call MIT Mental Health and Counseling
617.253.2916

Resources

Meditation for Beginners book + CD (Jack Kornfield)

Mindfulness for Beginners audiobook/CD (Jon Kabat-Zinn)

Walking Meditation book + CD (Anh-Huong Nhuyen and Thich Nhat Hanh)

How to Meditate booklet (Tara Brach) <http://tarabrach.com/how-to-meditate.html>

Practice



Thank you!

Questions? Feel free to contact me.

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