

Mindfulness: Promoting Total Worker Health & Safety by Being in the Moment



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University of California (UC)

- 10 campuses, 5 medical centers, 3 national labs
- > 233,000 students and > 190,000 employees



UC Office of the President (UCOP)

- Systemwide Headquarters
 - Manages fiscal & business operations
 - Supports academic & research missions



UCOP Office of Risk Services

- Implements Enterprise Risk Management
 - Includes UC Systemwide Centers of Excellence



Cheryl Lloyd
Chief Risk Officer



Ken Smith
Executive Director, EH&S

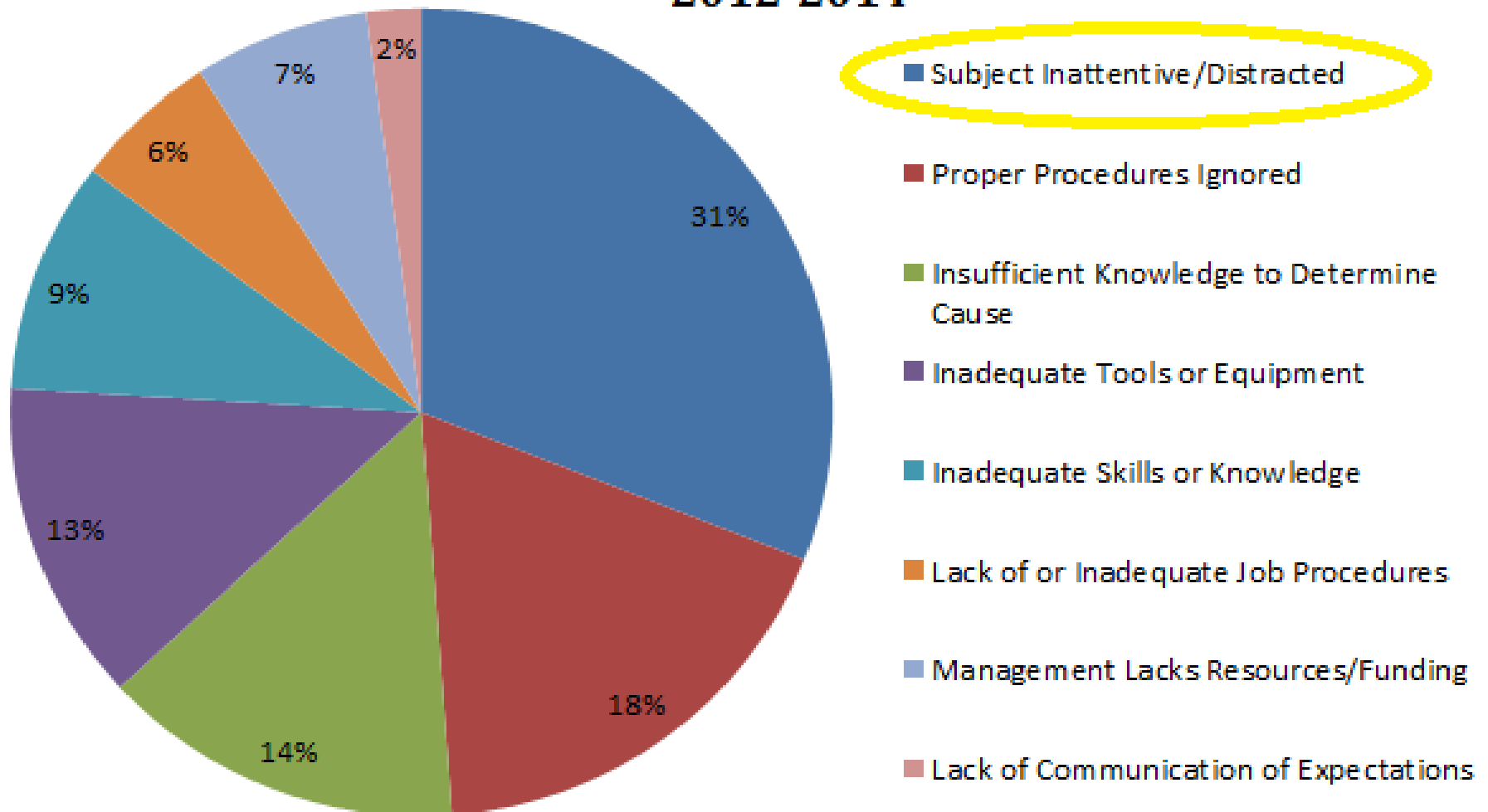




TWO HATS

Safety Issue: Inattention/Distraction

UC Irvine Campus Employee Injuries: Root Cause Trends 2012-2014



Is inattention/distraction a safety hazard at your organization?



If so, how are you addressing it?

Existing Safety Trainings



Solution: Mindfulness Training (Attention Training)





Mindfulness-Based Stress Reduction (MBSR)

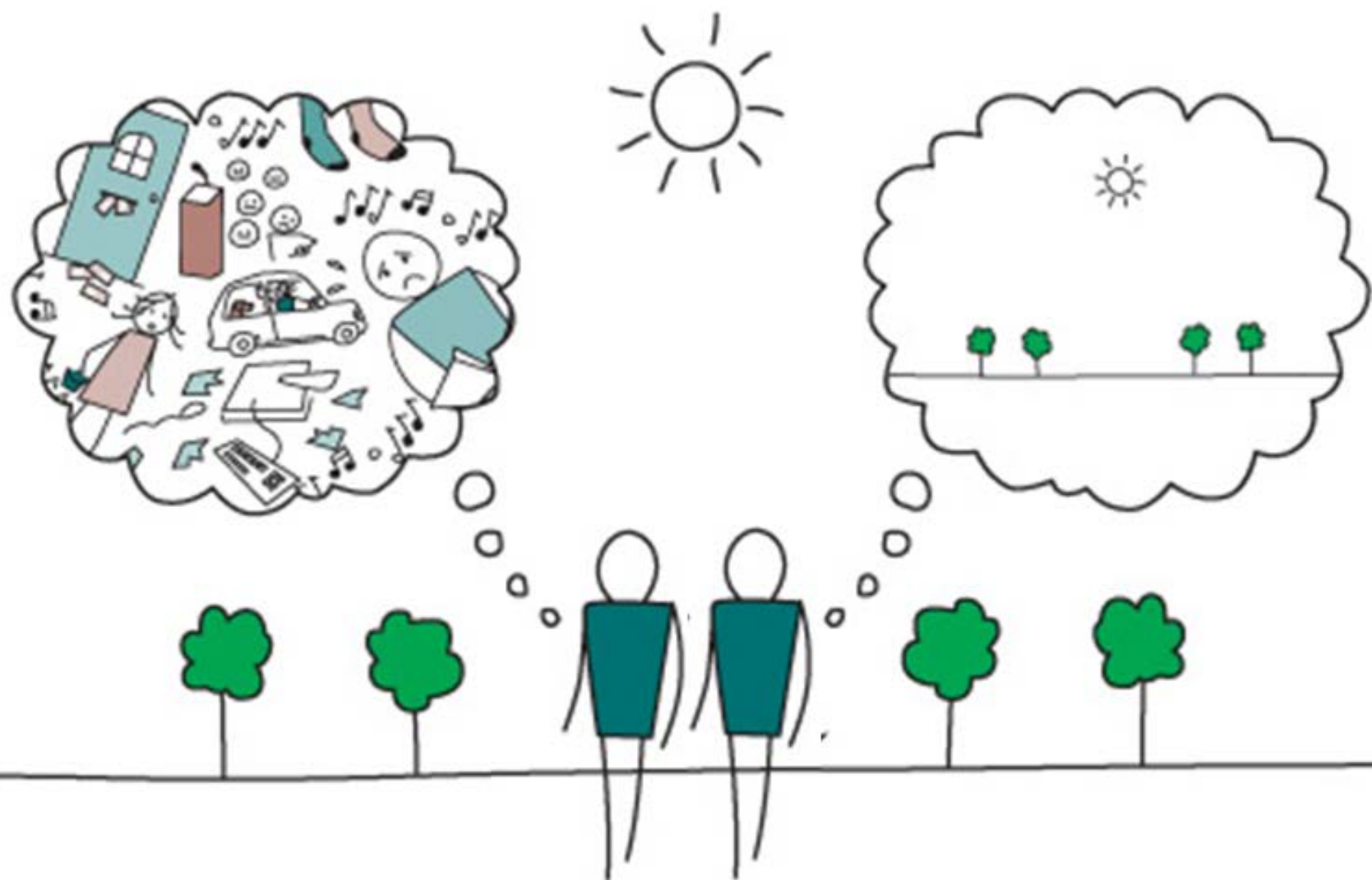
Formal Practices

- Body Scan
- Yoga-based movement
- Mindful Breathing
- Mindful Walking

Informal Practices

- Mindful Eating
- Mindful Driving
- Mindful Working
- Mindful of Any Moment!





Mind Full, or Mindful?

MBSR Offered Worldwide



Workplace Applications



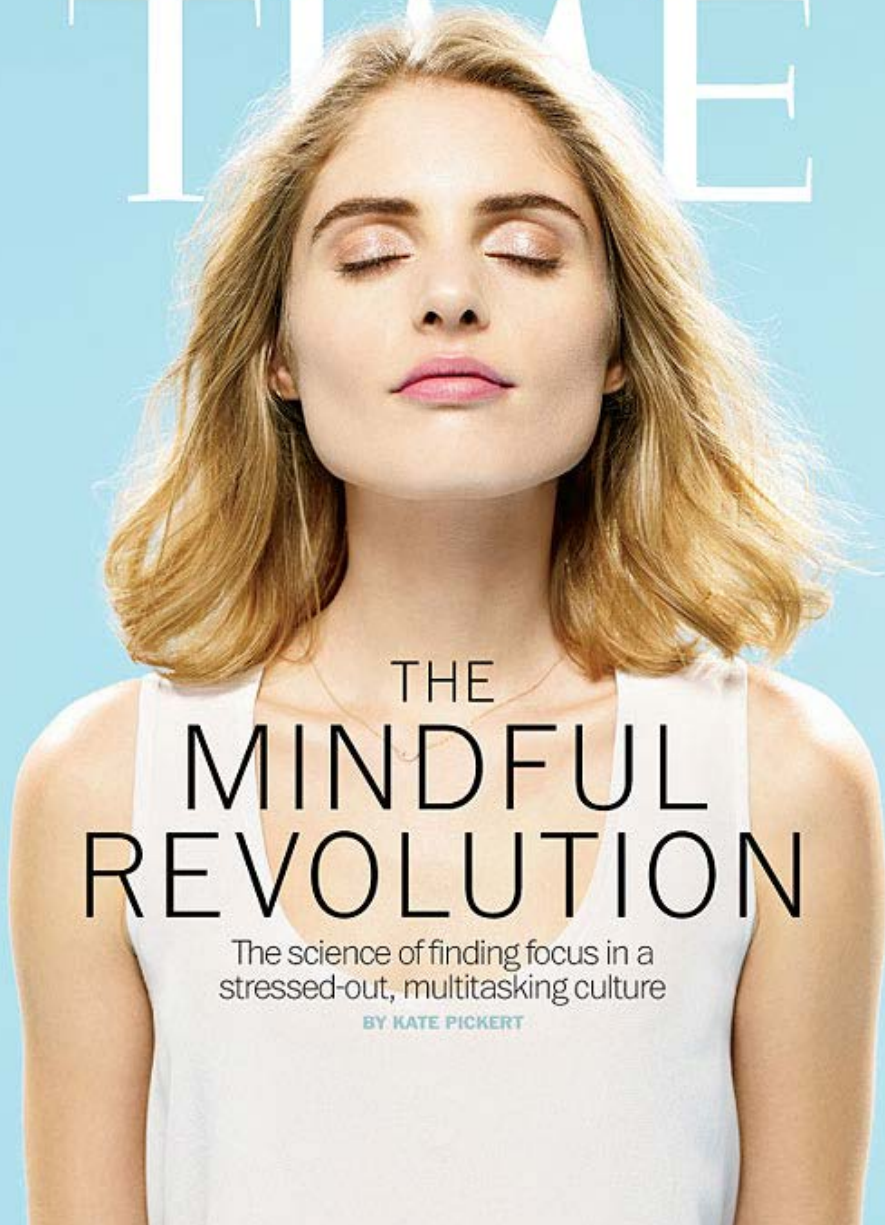
SEARCH
INSIDE
YOURSELF



FEBRUARY 3, 2014

Fleeing Syria Photographs by James Nachtwey / Peyton Power / Steve McQueen

TIME



THE MINDFUL REVOLUTION

The science of finding focus in a
stressed-out, multitasking culture

BY KATE PICKERT

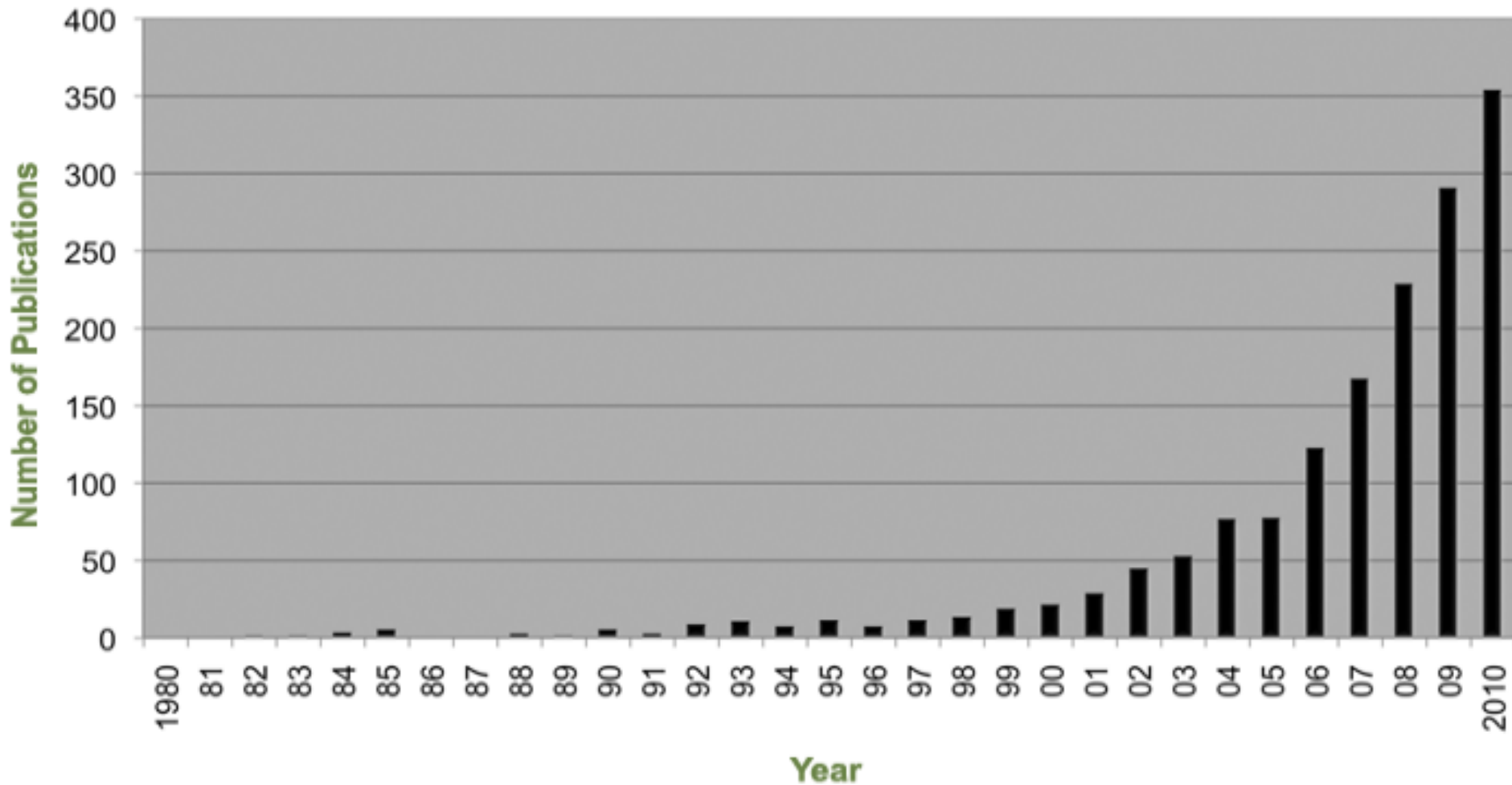
time.com

Mindfulness Research Centers

- Columbia
- Duke
- Eisenhower Medical Center
- Harvard
- Oxford
- Kaiser Permanente
- Scripps
- Stanford
- U Mass Medical School
- UCLA
- UCSD
- Numerous Programs Worldwide

Growth in Mindfulness Research

Figure 1. An example of growth in the mindfulness research literature across 30 years, 1980 - 2010



Notes: Results obtained from a search of the term "mindfulness" in the abstract and keywords of the ISI Web of Knowledge database on Feb. 5, 2011. The search was limited to publications with English language abstracts.

Summary of Research Findings

- Physical Health
 - Reduces stress, chronic pain, headaches, blood pressure, cholesterol
 - Improves immune function, sleep
- Mental Health
 - Reduces anxiety, depression, substance use
 - Helps OCD, eating disorders, emotion regulation
- Healthy & Workplace Populations
 - Reduces stress
 - Improves immune response, sleep, overall well-being



5 Days Mindfulness or Relaxation Training

Increase

- Vigor
- Immune response



Decrease

- Anxiety
- Depression
- Anger
- Fatigue
- Significant decrease in stress-related cortisol

Tang, Y. et al. (2007) *Short-term meditation training improves attention & self-regulation*, Proceedings of National Academy of Sciences. 104 (43), 17152-17156

Happiness

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Changes Brain Regions & Activity



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Science News

Mindfulness Meditation Training Changes Brain Structure in Eight Weeks

ScienceDaily (Jan. 21, 2011) — Participating in an 8-week mindfulness meditation program appears to make measurable changes in brain regions associated with memory, sense of self, empathy and stress. In a study that will appear in the January 30 issue of *Psychiatry Research: Neuroimaging*, a team led by Massachusetts General Hospital (MGH) researchers report the results of their study, the first to document meditation-produced changes over time in the brain's grey matter.



Testing Performance

Decreased mind-wandering

Improved working memory capacity

Better performance on GRE reading comprehension



Mrazek, MD et al. (2013) *Psychological Science*, 24 (5), 776-781

Job Performance **Mind Fitness**

**Improving Operational Effectiveness and
Building Warrior Resilience**

By ELIZABETH A. STANLEY and AMISHI P. JHA



Driving Safety

- Mindfulness May Improve Driving Performance
 - Increases environmental awareness
 - Blocks out distractions
 - Helps to quickly identify hazards
 - Young adults lower in mindfulness texted more



Fedlman, G. et al. (2011) *Personality & Individual Differences*, 51 (7), 856-861
Kass, S.J. et al. (2011) *Mindfulness*, 2 (4), 236-241

UNIVERSITY
OF
CALIFORNIA

Mindful HEALTH & SAFETY

• Cultivating Present Moment Awareness in the Workplace •



University of California, Irvine [Environmental Health & Safety](#) (EH&S) is collaborating with the [Susan Samueli Center for Integrative Medicine](#) to research the impact of mindfulness on workplace health and safety. Sponsored by [University of California Office of the President Risk Services](#), this project seeks to offer a complementary paradigm for creating safe and healthy workplaces across a variety of industries.

Search

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[Skeptical of Mindfulness?](#)

[Mindfulness: An Antidote](#)

[Mind Wandering & Happiness](#)

The logo features a stylized yellow sun with rays above a blue figure with arms raised. To the right of this icon, the word "Mindful" is in a large, bold, blue font, followed by "HEALTH & SAFETY" in a smaller, blue, all-caps font, and "PROGRAM" in a large, blue, all-caps font below it.

Mindful HEALTH & SAFETY PROGRAM

- Adaptation of MBSR
 - Delivered by qualified mindfulness instructors
- Formats
 - Original (22 hours)
 - 8 weekly 2-hour sessions + 6-hour retreat
 - Abbreviated (12 hours)
 - 10 weekly 1-hour sessions (one is a 3-hour retreat)
 - Planning Online
 - 20-30 minutes sessions over 1 year

Informal Pilot

EH&S Staff & Facilities Managers



- Abbreviated format
- Approximately 30 participants
- No active control group
- Findings: Improved attention & reduced stress

Formal Pilot



- Sample
 - 50 Nurses
 - UC Irvine Medical Center
 - High injuries & errors
 - Compensation - 22 CEUs
- Random Assignment
 - Experimental
 - Mindfulness
 - Active Control
 - Health education

Coming into the Moment



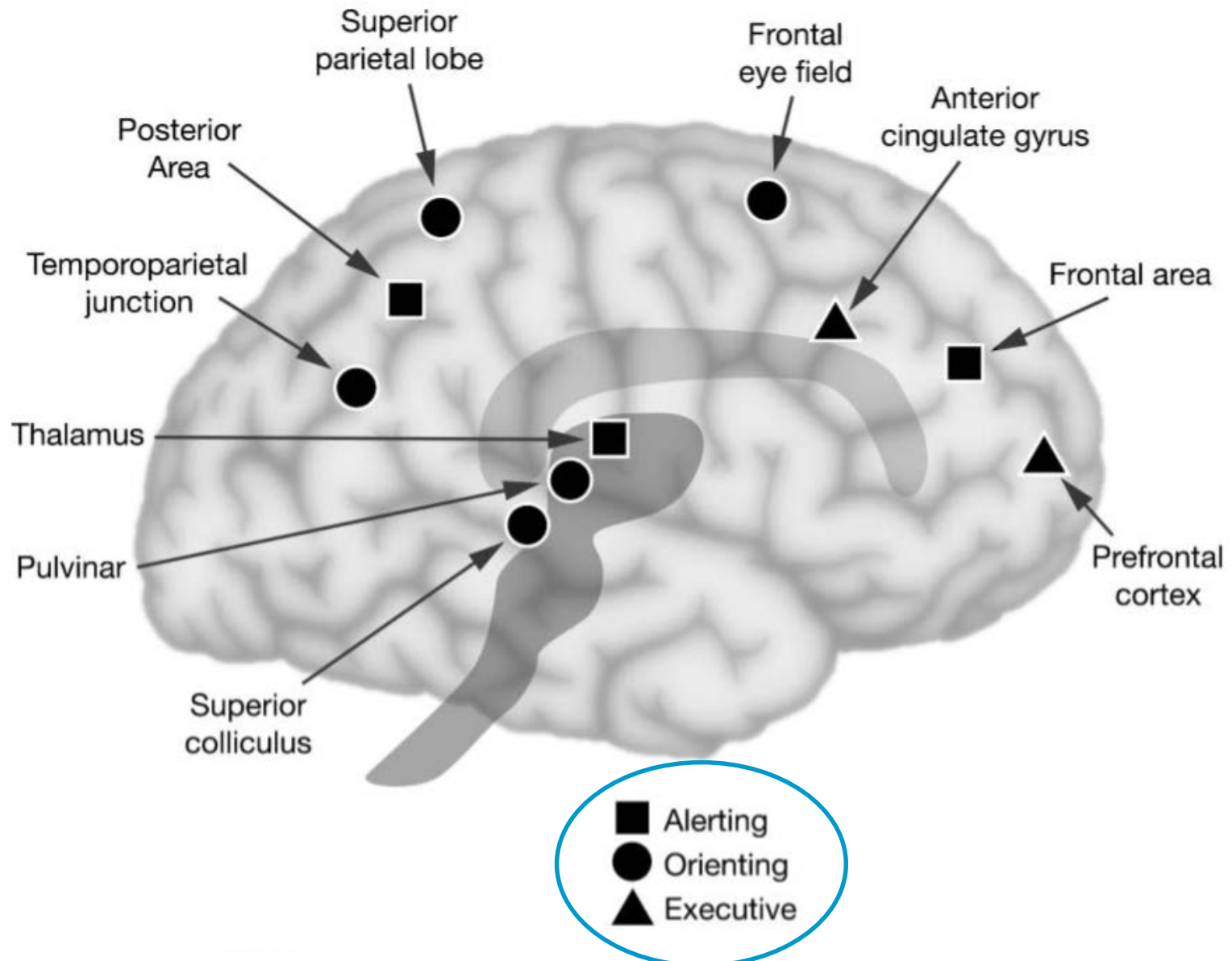
Mindful Handwashing



Results

- Mindfulness
 - Mindful Attention Awareness Scale
- Stress
 - Perceived Stress Scale
- Work Engagement
 - Utrecht Work Engagement Survey
- Burnout
 - Maslach Burnout Inventory

Attention Networks



Awaiting Results (Summer 2016)

- Work-Related Injuries
 - Occupational Health data
 - Work-Related Errors
 - Self-Report
 - Sick Days
 - HR data
 - Job Retention
 - HR data
 - Organizational Costs
 - Workers' Compensation data & medical premiums
- 
- A 3D bar chart and a 3D pie chart are displayed on a grid background with numbers. The bar chart has several blue bars of varying heights. The pie chart is also blue and is positioned in front of the bar chart. The grid background contains various numbers, including 110, 303, 272, 920, 839, 484, 730, 810, 748, 924, 519, 991, 825, 339, 501, and 910.



Participant Feedback



Recap

What we are Examining

Whether Mindfulness:

- Reduces workplace injuries
- Reduces workplace errors



Recap

What We Know

Research Supports that Mindfulness:

- Improves Physical Health
- Improves Emotional Health
- Improves Overall Well Being
- Improves Attention
- Improves Performance
- Changes the Brain



Annual National Cost Occupational Injuries & Illnesses



Leigh, J. P. (2013) *Economic Policy Institute*

Return on Investment

**\$250/person for a
mindfulness course**

A 3D bar chart with seven blue bars of increasing height from left to right. A green arrow starts at the base of the first bar and points diagonally upwards and to the right, passing over the top of the last bar. The chart is set against a white background with a light blue shadow beneath the bars.

