

# BRAINHEALTHY WORKPLACE™



## Brainomics:

The immense economic benefits of maximum brain performance ... and the high cost of low brain performance

Workplace stress is at epidemic levels: more than 30% of U.S. employees experience chronic job-related stress\*, with an estimated economic cost of \$300B\*\*. How does chronic stress harm us?

- Is toxic to neurons in the hippocampus (center for memory and new learning)
- Lowers dopamine, our feel-good neurotransmitter
- Impairs thinking and slows neuroplasticity (the brain's ability to adapt)
- Hyperactivates the "fight or flight" amygdala
- Reduces fluid intelligence
- Increases brain atrophy
- Causes people to be error-prone and shallower thinkers; distractibility costs U.S. companies an estimated 15% in lost productivity each year\*\*\*

Keep chronic stress and burnout at bay.  
Boost your team's agility, adaptability,  
efficiency, productivity and performance.

The comprehensive, customized BrainHealthy Workplace program provides education and practical tools – grounded in demonstrated science – that enhance brain health and performance professionally and personally.



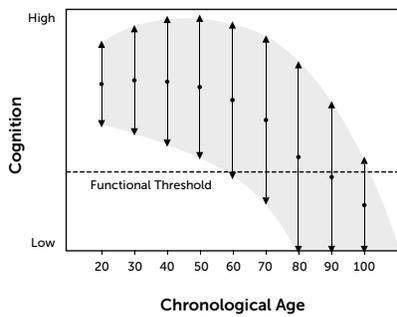
\* The United States of Stress 2019. Everyday Health.

\*\* Stress and Health Disparities. 2017. American Psychological Association.

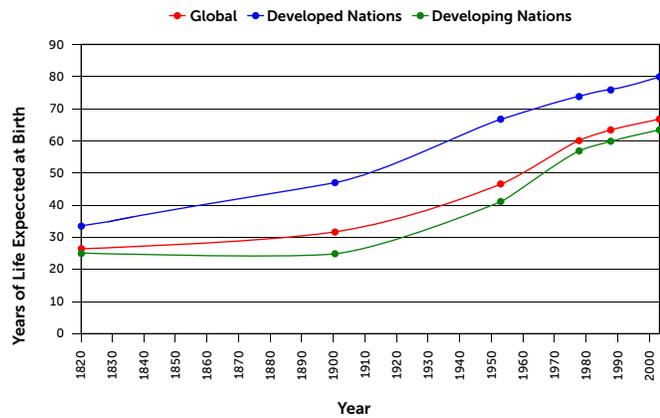
\*\*\* Brain Drain: The Mere Presence of One's Own Smartphone Reduces Available Cognitive Capacity. 2017. *Journal of the Association for Consumer Research*.

# On average, we are outliving our peak brain years by 20 years.

But science has shown that we can counter the typical effects of age-related decline by tapping into the brain's lifelong ability to get stronger and work better.



Depiction of the zone of possible cognitive development across adult life for a given individual. The blue dots indicate a general developmental trend for the individual under typical circumstances. The upper and lower curves indicate optimal and suboptimal boundaries that define the zone of possibility (shaded gray area). Upward and downward movements at a given age (arrows) are influenced by biological, behavioral, and environmental influences. The functional threshold indicates a point at which goal-directed cognition in the ecology will be compromised.



Source: Indur M. Gokhale, "The Improving State of our World" Washington, DC, Cato Institute, 2007. 35. France used as a proxy for Developed Nations 1900 and earlier.

## Brain training works – the science is clear.

In randomized clinical trials with healthy adults over 50\*:

**8% ↑**

CEREBRAL BLOOD FLOW

**23% ↑**

CAPACITY FOR COMPLEX REASONING



DECADES OF "YOUNG BRAIN" FUNCTION REGAINED THROUGH INCREASED NEURAL EFFICIENCY

In a randomized clinical trial with individuals (primarily military and veterans) with chronic-stage traumatic brain injury\*\*:

**43% ↓**

STRESS LEVELS

**58% ↓**

DEPRESSIVE SYMPTOMS

In a 12-week study of healthy adults ages 18 to 87\*\*\*:

**80%**

SHOWED POSITIVE CHANGE IN BRAINHEALTH INDEX

**50%**

SHOWED AT LEAST A 10% BRAINHEALTH INDEX INCREASE



THE ABILITY TO CREATE OR SUSTAIN CHANGE DID NOT DEPEND ON AGE

\* Chapman, SB, et al. 2015. "Neural mechanisms of brain plasticity with complex cognitive training in healthy seniors." *Cerebral Cortex*.

\*\* Vas et al. 2015. "Reasoning training in veteran and civilian traumatic brain injury with persistent mild impairment." *Neuropsychological Rehabilitation*.

\*\*\* Chapman, SB, et al. 2021. "A novel BrainHealth Index prototype improved by telehealth-delivered training during COVID-19." *Frontiers in Public Health*.

# Enhance leadership development. Provide a meaningful wellness benefit. Give your organization a competitive edge.

The BrainHealthy Workplace program is based on Strategic Memory Advanced Reasoning Tactics (SMART™), a proprietary methodology developed and tested by BrainHealth researchers and other teams over the past three decades, focused on teaching strategies that strengthen the brain's frontal networks.



## How it works:



Get baseline, periodic testing via BrainHealth Index



Create personal/team game plan in Think-and-Do Tanks



Engage in weekly online practices



Learn brain-healthy strategies with self-paced online modules

Internal champions receive early training to encourage broader participant engagement and empowerment.

The program can be delivered as a hybrid, with both virtual and in-person elements.



Individual progress is charted by periodically getting a **BrainHealth Index** – a proprietary, holistic measure of the brain's current health and performance levels obtained through a comprehensive set of 27 assessments.

Individual feedback and BrainHealth Index metrics are **CONFIDENTIAL**. Only de-identified, aggregate data are shared with leadership to track engagement and measure progress against previously established Key Performance Indicators (KPIs).

FOR MORE INFORMATION: [centerforbrainhealth.org/brainhealthy-workplace](https://centerforbrainhealth.org/brainhealthy-workplace)