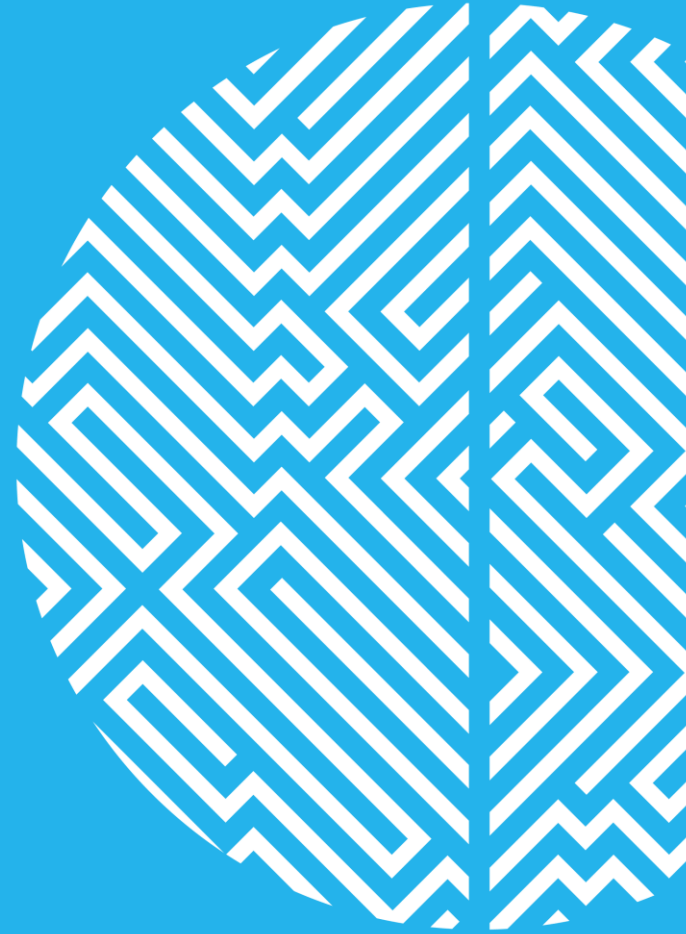




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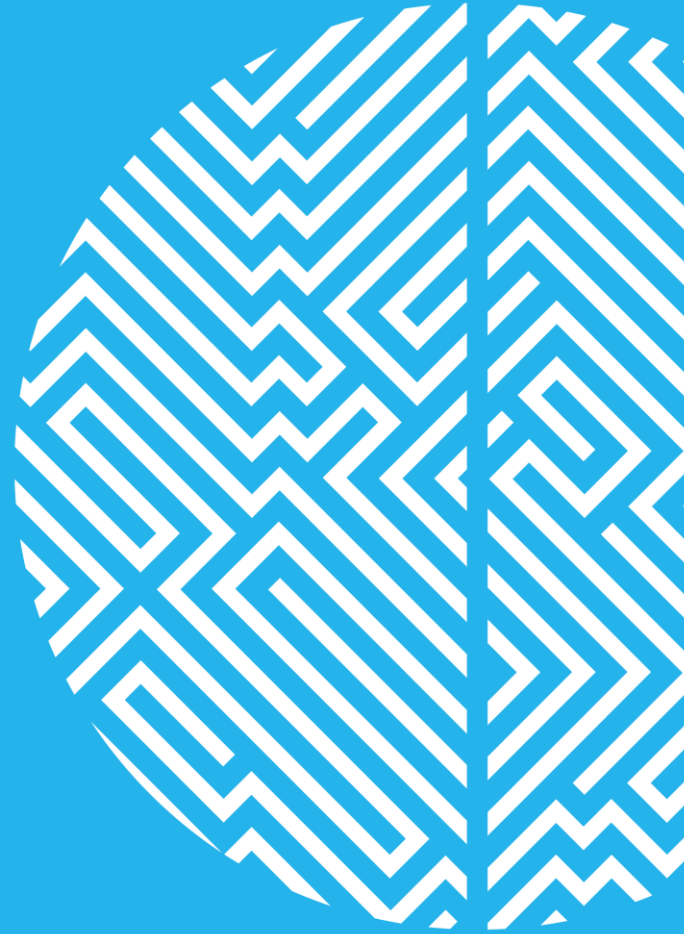
The Science Behind a Strength-Based Approach to Brain Health





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Without Brain Health,
We don't have Health:
What we do matters



Research circa 1999: Alzheimer's disease

Research Findings: Early Stage Alzheimer's

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Effects of Cognitive- Communication Stimulation for Alzheimer's Disease Patients Treated With Donepezil

This study adds to the growing evidence that active cognitive stimulation may slow the rate of verbal and functional decline and decrease negative emotional symptoms in AD when combined with acetylcholinesterase inhibitors. **The fact that AD is a progressive brain disease should not preclude ameliorative treatment.**

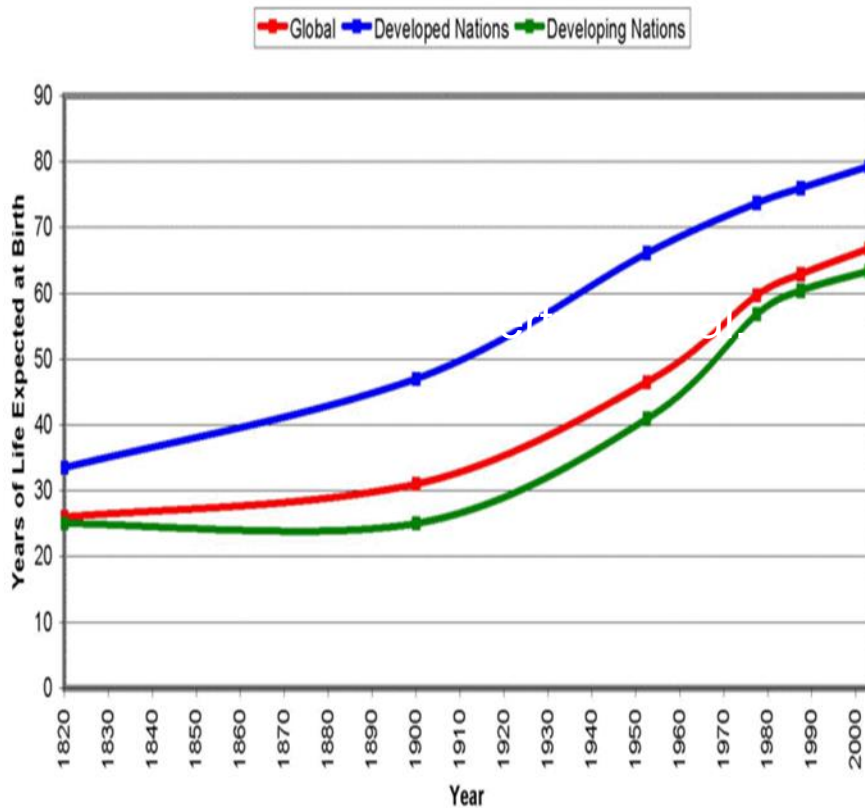
Journal of Speech, Language, and Hearing Research • Vol. 47 • 1149–1163 • October 2004 • ©American Speech-Language-Hearing Association
1092-4388/04/4705-1149

Research Findings: Early Stage Alzheimer's

- Individuals in the strength-based intervention showed:
 - A slower rate of functional decline
 - Better patient reported quality of life
 - Less irritability and apathy

Research: Healthy Aging

Lifespan doubles Brainspan



Source: Indur M. Goklany, "The Improving State of our World." Washington, DC: Cato Institute, 2007. 36. France used as a proxy for Developed Nations 1900 and earlier.

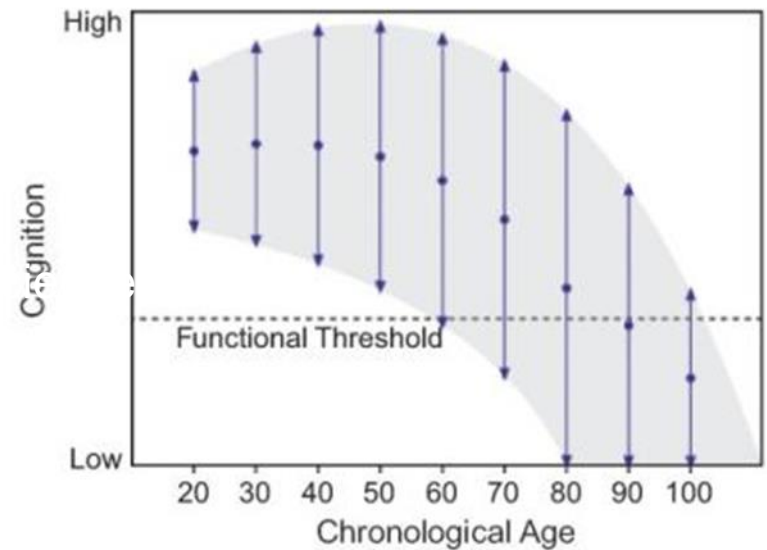


Fig. 1. Depiction of the zone of possible cognitive development across adult life for a given individual. The blue dots indicate a general developmental trend for the individual under typical circumstances. The upper and lower curves indicate optimal and suboptimal boundaries that define the zone of 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.

Hertzog et al., Psych. Science, 2009.

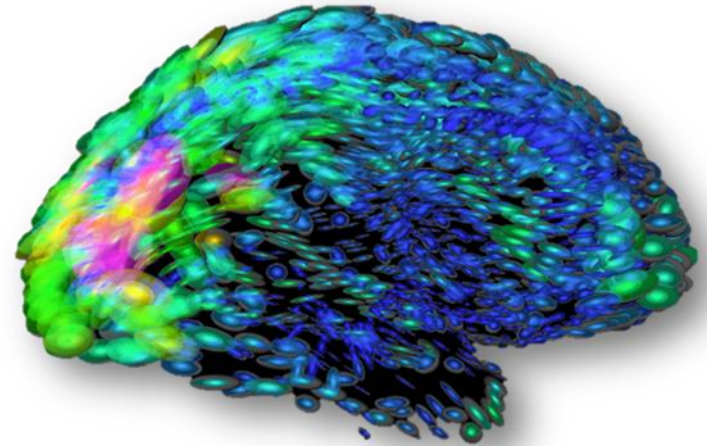
“ ... around 1/3 of cases of Alzheimer’s disease worldwide might be attributable to potentially modifiable risk factors.”

The Lancet Neurology, Volume 13, Issue 8, August 2014

Brain Plasticity

Principles

- Engagement
- Repetition
- Relevance
- Increased load



What is SMART?

A strategy-based training to
strengthen critical frontal lobe functions.

Helps you think smarter, not harder.

A SMART BRAIN IS FRONTAL LOBE INTEGRITY.

Our frontal lobe separates us from all other forms of life.

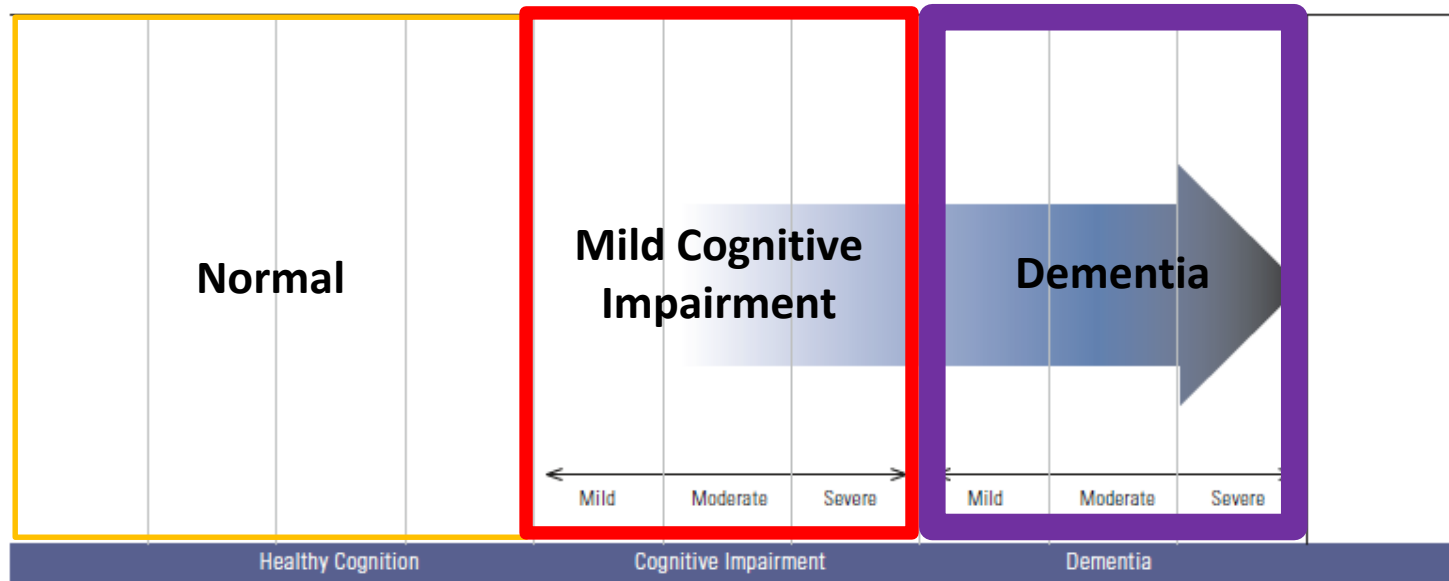
Our frontal lobe is our brain's CEO (Cognitive Executive Officer.)



Research: Mild Cognitive Impairment

Figure 16:

Healthy Cognition-to-Dementia Continuum



An individual's movement from healthy cognition to dementia is a continuum. The transition from healthy or normal cognition to cognitive impairment is not distinct, but blurred, as represented by the blurred coloring between various stages of cognitive function in the illustration. Similar transitions occur between cognitive impairment and dementia. When individuals experience declines in cognitive function that are severe enough to be noticeable to others and show up on cognitive tests, but not severe enough to interfere with daily life, they may have mild cognitive impairment (MCI). Individuals with MCI are at greater risk of developing Alzheimer's disease.

MCI Pilot Research Findings

- Reasoning Training
 - Executive Function
 - Memory
- New Learning
 - Detail Memory
- Findings support the potential for gist reasoning to strengthen latent capacities in MCI

Current Projects



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Senior Moments:

**Are memory changes catching your attention?
Do you feel that you forget more than others your age?**

*You may qualify to participate in a study that evaluates the effects of
cognitive training and neurostimulation on brain function.*

Participants receive an MRI, EEG, and cognitive testing.

Qualifications:

- Ages 50 – 80
- Overall good health (diagnosis of MCI is OK)

For more info, contact Jennifer.

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Discovery Group

A strength-based intervention for individuals with Alzheimer's disease or other dementia

- Have you recently been diagnosed with Alzheimer's or other dementia?
- Are you interested in participating in a research-based approach targeting strengths?
- Do you want to focus on life rather than the diagnosis?

Eligible individuals will participate in an 8 week small group intervention.
A caregiver support group will be offered at the same time.

National Initiative: Dementia Friendly America

In July, 2015 at the White House Conference on Aging a national effort was announced to create a dementia friendly America

- What is a Dementia Friendly America?
- A dementia friendly community is defined as one that is:
 - Informed
 - Safe and respectful of individuals with dementia and their families
 - Provides supportive options
 - Fosters quality of life

Goal of Creating a Dementia Friendly America

- Remove stigma
- Enable people with Alzheimer's to come out of the shadows and engage in their communities
- Help families effectively manage all that comes with the critical task of caregiving
- For more information see www.dfamerica.org

CenterforBrainHealth.org
BrainHealthDaily.com