



CENTER *for*
BRAINHEALTH®
THE UNIVERSITY OF TEXAS AT DALLAS

From Mental Health to **Brain Health**

Expanding the Framework for Flourishing



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Introduction

Center for BrainHealth's White Papers distill what we have learned about brain health over the last few decades into clear, real-world insights. Brain health is an actionable concept in daily life; and when supported by scalable strategies, brain health drives human flourishing and economic success across populations.

In this White Paper, we differentiate brain health from a closely related concept: mental health. This distinction is important because brain health provides the most powerful foundation that enhances thriving across populations.

Defining Brain Health vs. Mental Health

A well-known medical concept that refers to a person's emotional, psychological and social well-being, mental health is commonly understood through the presence or absence of symptoms (such as depression, anxiety, stress, rumination, etc.) and is measured by levels of psychological distress, ability to cope with stress, and how well a person can engage in work, relationships and their community.

Mental health challenges are exploding in prevalence, a cause for great concern, particularly among younger populations. Despite society's increasing focus, the medical model of mental health is not reducing the growing incidence.

The number of cases of mental health disorders has nearly doubled in the last three decades.¹

20% of U.S. adults live with a mental health disorder.²

The U.S. spends about \$282 billion on mental health annually³ (comparable to the cost of a recession).

At Center for BrainHealth, we are committed to addressing the burgeoning mental health crisis by stepping back to focus on the bigger picture – brain health. As a higher category of health, brain health considers drivers of mental health, as well as cognitive performance and the physical health and development of the brain.

After 25 years of cognitive neuroscience research, we have come to define brain health as:

The continual promotion of optimal brain development, cognition, well-being and connectedness — leveraging daily brain skills that help people thrive at every age and life stage.

So, how are brain health and mental health interconnected? Brain health is a superordinate concept that encompasses the emotional and behavioral aspects of mental health while emphasizing the cognitive-neural circuits that underpin well-being and executive functioning. Perspectives that center on the concept of brain health align with how the brain actually operates, how we use it, and how we care for it.

Measuring Brain Health

Through extensive peer-reviewed research, we developed the first-ever validated measure of holistic brain health, able to track both improvement and decline. The BrainHealth Index is a composite measure of more than 20 individual assessments combined to measure three key factors of brain health:

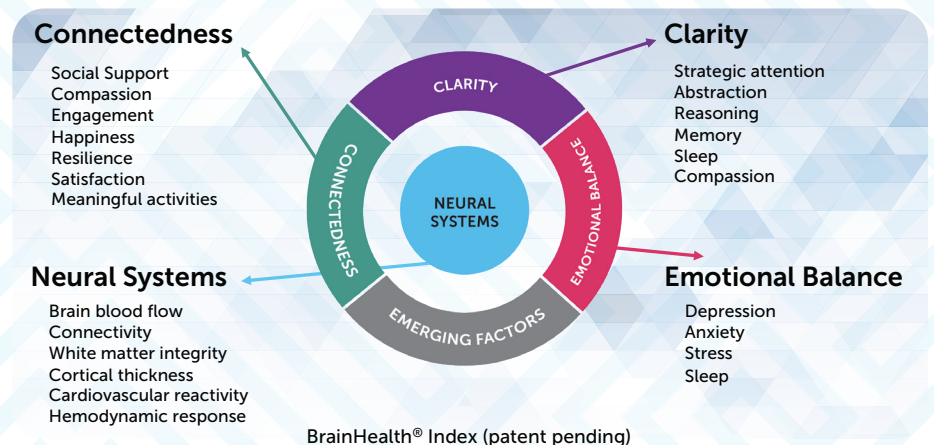
- Clarity (*cognitive function*)
- Emotional Balance (*mental well-being*)
- Connectedness (*social and purpose-driven engagement*)

Mental health is not a single component of brain health; rather, it is interwoven with all known factors: clarity, emotional balance and connectedness. For example, symptoms of psychological distress, such as depression and anxiety, are considered in measuring emotional balance; likewise, measurements of resilience, quality of life and social engagement are factored into connectedness.

As a standalone concept, mental health is typically viewed through a lens of deficits, with a narrow focus on preventing or treating symptoms. In contrast, the more holistic concept of brain health is understood through the lens of proactive self-agency.

The many dimensions of brain health offer a wide range of performance indicators (positive or negative) that can be evaluated at any point in time. To illustrate, our BrainHealth Index offers a whole-person focus on the brain's lifelong ability to improve. Someone may show strength within the emotional balance factor but could benefit from improving cognitive skills (within the clarity factor) to advance toward their thriving potential. And the reverse is also true: someone showing strong cognition (clarity) may demonstrate weaknesses in emotional balance or connectedness; adopting brain skills in that area can yield a broad impact on brain performance.

An imbalance in holistic brain health can lead to a feeling of being “stuck,” unable to generate solutions, adapt to change or envision a path forward. If not addressed proactively,



this condition can lead to both poor cognitive performance and a negative emotional state (i.e., a mental health challenge).

Applying brain-healthy strategies and executive functioning tools like “possibility thinking” (a flexible and innovative way to create a mindset shift), can help people

find new ways of approaching challenges while minimizing emotional distress – such as feelings of frustration, negative self-talk or burnout.

By adopting a holistic and wellness-driven perspective on brain health, we don’t just mitigate mental health

symptoms – we take charge of our overall brain wellness and performance, which can help us thrive in our lives.

Empowering People to Thrive

What it means to thrive in life has been discussed throughout human history, from the ancient Greek ideals of virtue and happiness to modern approaches that guide holistic health and systems thinking. We believe that better brain health is a universal element of thriving – the ability

to flourish, rather than merely survive, within the context of your life.

Center for BrainHealth brings extensive real-world experience improving brain health across diverse populations – including

military service members and veterans, adolescents, college and university students, neurodivergent young people, corporate professionals, healthy agers and underserved communities.

We believe three defining characteristics make the concept of brain health uniquely powerful for effecting real change in all people’s lives.

1. Brain health focuses on upward potential.

GROWTH-ORIENTED

Traditional mental health frameworks focus on deficits and center on restoring people to a baseline level of functioning, whereas the concept of brain health shifts the focus to empowering continual growth. With a brain health perspective, the goal is not just recovery to baseline wellness, but continual growth by unlocking your ability to strengthen neural-cognitive assets, such as strategic attention, integrated reasoning and innovation.

Data from The BrainHealth Project show brain health can improve regardless of an individual’s age, gender or education level when they invest in brain health training.^{4,5}

Unsurprisingly, results suggest the longer you invest in strengthening your brain, the greater the improvement!

Upward potential is possible because the brain is one of the most modifiable organs in the body. The human brain can adapt, rewire and become stronger depending on how we use it and care for it.

Center for BrainHealth has designed and tested protocols to improve brain health and

performance within varied populations (healthy and with chronic challenges) for more than two decades, finding that the formula for change is simpler than you may expect: teach people some basic concepts of brain health, empower them with simple, science-backed strategies and tools to implement in daily life, and

layer in the ability to track change over time to maintain the momentum. Peer-reviewed articles from multiple trials of our Strategic Memory Advanced Reasoning Tactics (SMART™) brain health training with a wide variety of populations (both healthy and with chronic challenges) clearly demonstrate the effectiveness of this growth-oriented approach. And most recently, imaging research confirms that physical changes

are indeed taking place in the brain⁶.

The best news is that there is no ceiling that we know of. Adopting brain-healthy habits allows people to sustain an upward trajectory of brain health and performance over time, with no known upper limit. Our research has shown that regularly engaging in science-backed strategies that support brain health can

produce widespread long-term benefits to emotional functioning, as well as personal, social and occupational performance.

When we move beyond the deficit-based view of mental health and recognize the wide range of brain potential, we open the door to new possibilities, like continual growth and an upward trajectory of thriving for individuals and populations.

2. Brain health is for everyone.

INCLUSIVE

While mental health interventions typically target specific individuals or populations, taking steps to strengthen brain health applies to everyone.

Like any organ, the brain can experience dysfunction and even medical conditions. Strengthening brain health is about more than mitigating deficits or symptoms associated with a diagnosis; a brain health approach provides a proactive way to optimize brain function – no matter the starting point, but especially in health – while inoculating against potential future challenges by helping increase resilience, flexibility and stamina.

The expansive conceptual framework that undergirds brain health combines an understanding of emotional well-being, cognitive function, social connectedness and supporting neural networks. Rather than replacing focused

mental health treatments, brain health strategies can work in tandem with them to promote better health and overall wellness. Thus, brain training can help optimize your brain health and wellness, while medical treatment manages specific conditions. Together, both optimize your overall health! These are not competing strategies but layered supports for the same goal of better brain function and well-being.

Focusing on “brain health” may even lessen cultural stigma often associated with mental health support. The stigmatizing term can make people feel defined by a diagnosis and perhaps unwilling to seek support. Rather than describing people as either “healthy” or “unhealthy,” a brain health perspective recognizes every person’s potential for improvement.

That’s why a performance-based, strengths-focused approach is gaining acceptance among individuals, organizations, policymakers,

and even military leaders. It provides a framework that draws together mental health, cognitive capabilities, socio-economic factors and more, all under the singular umbrella of brain health.

A prime example is our Optimal Brain Performance for Warfighters program, which is creating ripples of positive change across groups of active and veteran military service members. We quickly discovered that participants’ enthusiasm for the program starts with its name, and two conspicuously absent words: mental health.

Everyone has a brain, and everyone can benefit from learning to use it better. Brain health training prioritizes personal empowerment and holistic growth potential, meeting individuals where they are now and leveraging the science of neuroplasticity to help boost their brain performance today – and tomorrow.

3. Brain health training is scalable.

EXPANSIVE

At Center for BrainHealth, we remember when brain training could only be accomplished face to face. Today, we have scalable models to share a multitude of simple, highly effective brain health strategies and tools that can improve human thriving in any population. We further expand our reach by training third-party trainers.

This approach allows us to work with schools and universities, corporations and nonprofits all over the U.S. When trusted

leaders bring brain health training into their communities, they accelerate the positive effects of brain training on individuals and the community as a whole, elevating connectedness and cultural interest in brain health.

As an example, our Adolescent Reasoning Initiative™ program enables middle school through ninth grade teachers to take advantage of this important brain development stage and optimize student learning for success in the classroom and beyond. We train the educators, who then apply the program in their classrooms. Over the past 15+ years, we

have reached more than 90,000 students through this approach, with significant and even astounding results in academic success.

This is fantastic progress that leverages existing science and technology — no need for costly investments or public policy changes. Instead, this community-centered approach galvanizes collective action to boost brain health across entire groups and organizations.

**We call this the
self-organizing brain
health revolution.**

Conclusion

As mental health challenges continue to rise despite growing attention from the medical community, adopting a more holistic and proactive brain health approach may offer a better path for wellness across the lifespan and reveal new possibilities for human flourishing.

Everyone can improve their brain health by learning to use their brains more efficiently and effectively. Activities that support brain health also benefit mental well-being.

Three defining characteristics of brain health make the concept unparalleled in its potential to create meaningful and measurable impact: brain health's upward potential, universal benefits and scalable impact.

Offering both immediate and long-term returns, brain health is an investment that can pay off for people in the present (through improved performance and emotional well-being), while also building cognitive reserves for the future (through habits that

promote brain resilience) — high-value benefits that compound over time.

And when we empower populations at scale, we enable entire communities and organizations to thrive.

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