



SOCIAL ENGAGEMENT:

***THE WHAT, WHY AND HOW BEHIND SOCIAL CONNECTIONS
IN HOME HEALTHCARE***

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and





WEBINAR OBJECTIVES

- Learn the current science behind social engagement and cognitive wellness
- Understand the benefits of promoting social engagement to cognitive health in the home healthcare settings
- Practical solutions for encouraging social engagement for their home healthcare clients: Hearing loss and social-based brain training

**Living longer, healthier
lives demands
cognitive health**

**Research shows
lifestyle changes can
reduce we can reduce
dementia rates
worldwide by 35%**

**Neuroscience
advances show there
is much we can do to
take better control of
our brain fitness**

BRAIN HEALTH



WELCOME TO THE BRAIN AGE

**98% of adults over 50
rate brain health
important/very
important (*AARP 2015*)**

**1 in 8 adults 60+
complain of increased
forgetfulness (*CDC 2013*)**

**While many seek better
brain health,
they are unsure
what to do (*AARP 2017*)**

**Neurotechnology
market 6 billion by 2020
(*Sharp Brains 2014*)**

NEUROPLASTICITY

“Capacity of neurons and neural networks in the brain to change their connections and behavior in response to new information, sensory stimulation, development, damage or dysfunction.”

— *Encyclopaedia Britannica*



COGNITIVE HEALTH

Physical Well-being
Social Connectivity
Independence
Vitality

SUCCESSFUL AGING



BRAIN HEALTH

Physiology ♦ Function ♦ Vitality ♦ Prevention

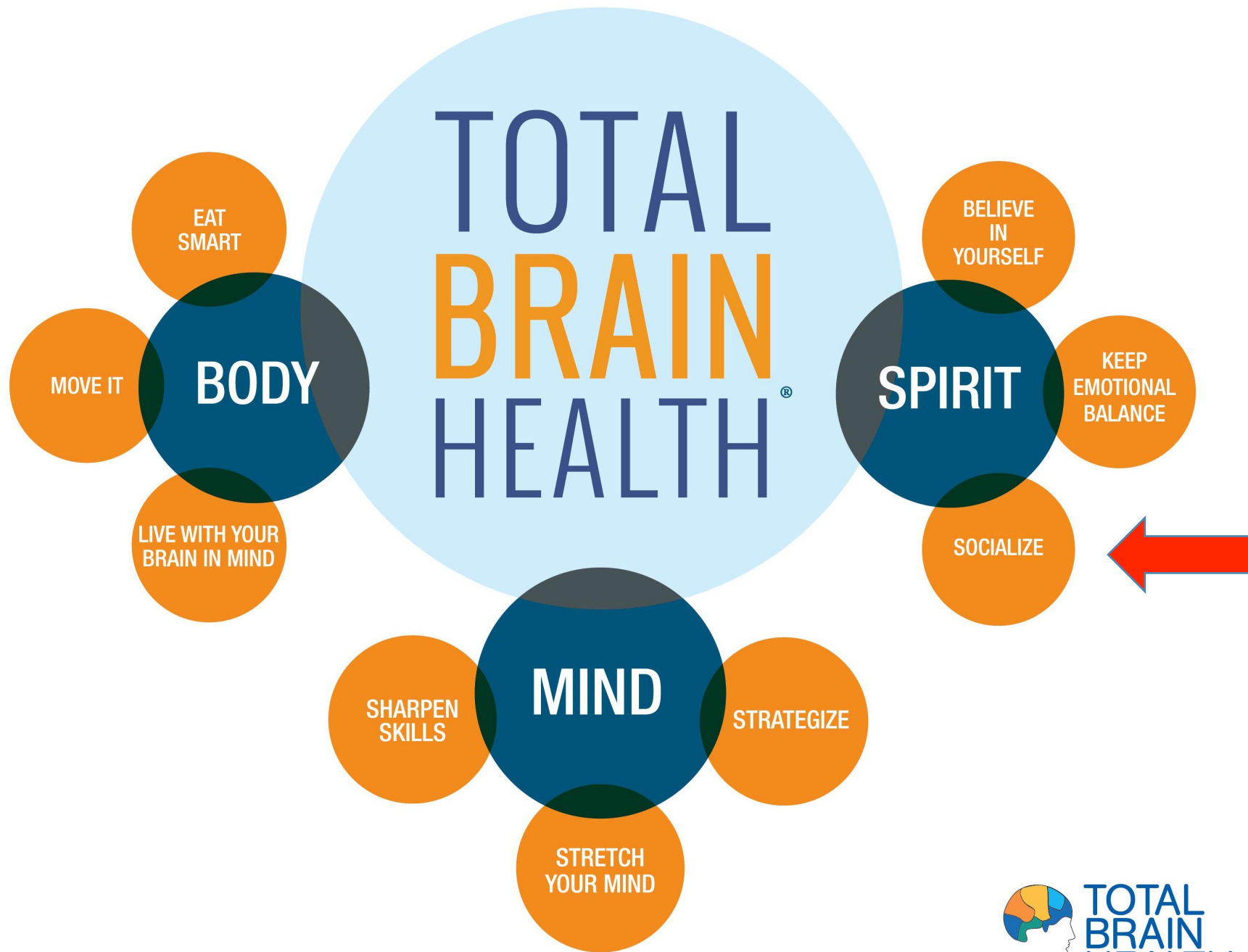
Daily Performance

Long-Term Risk

Intellectual

Physical

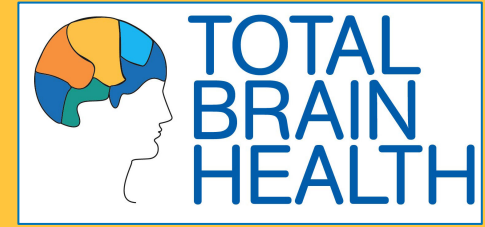
Socio-
Emotional



SOCIAL ENGAGEMENT

“Social engagement is interacting with others, feeling connected to other people, doing purposeful activities with others and/or maintaining meaningful social relationships.”

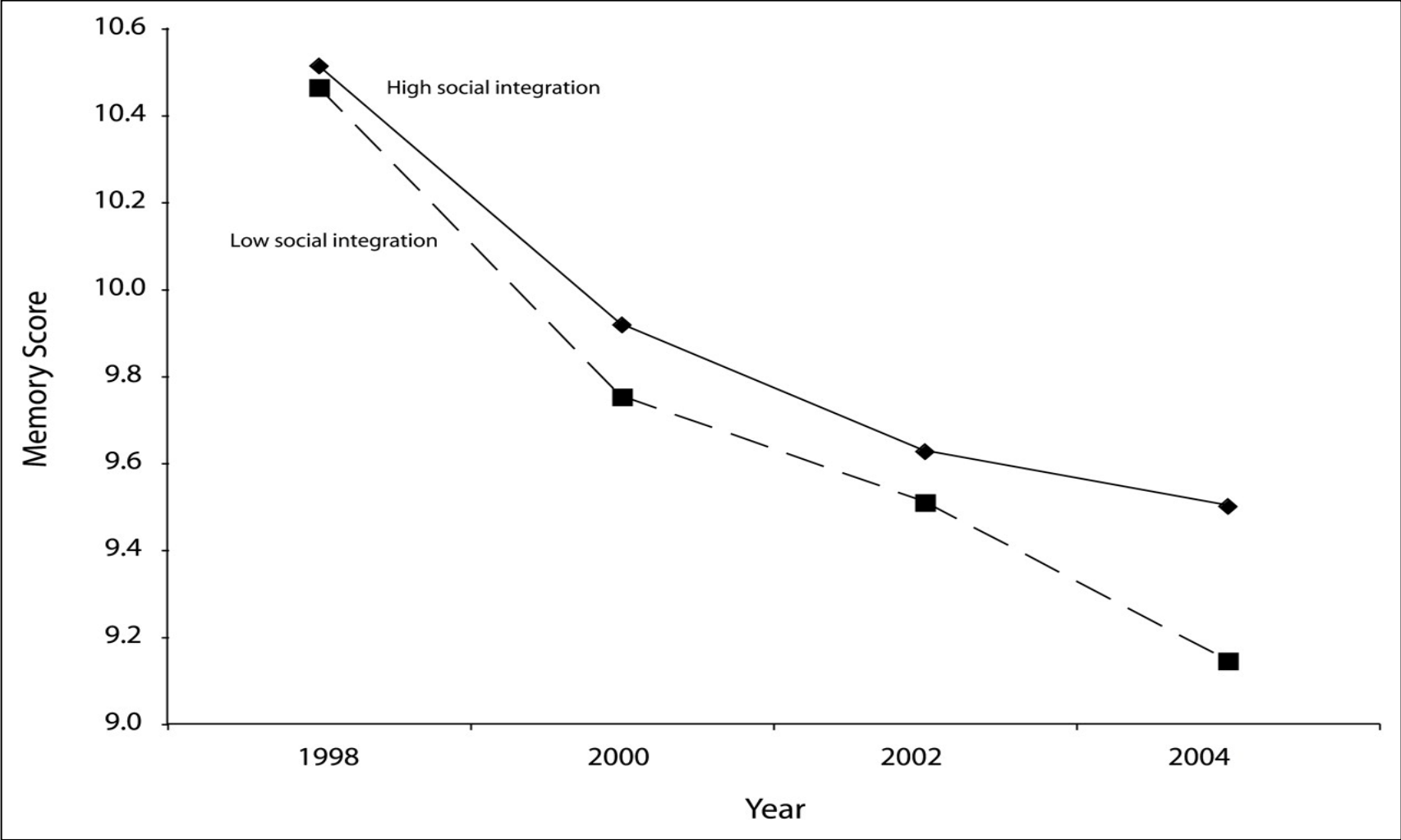
- Global Council on Brain Health 2017



SOCIAL ENGAGEMENT & BRAIN HEALTH | Observational Research Evidence

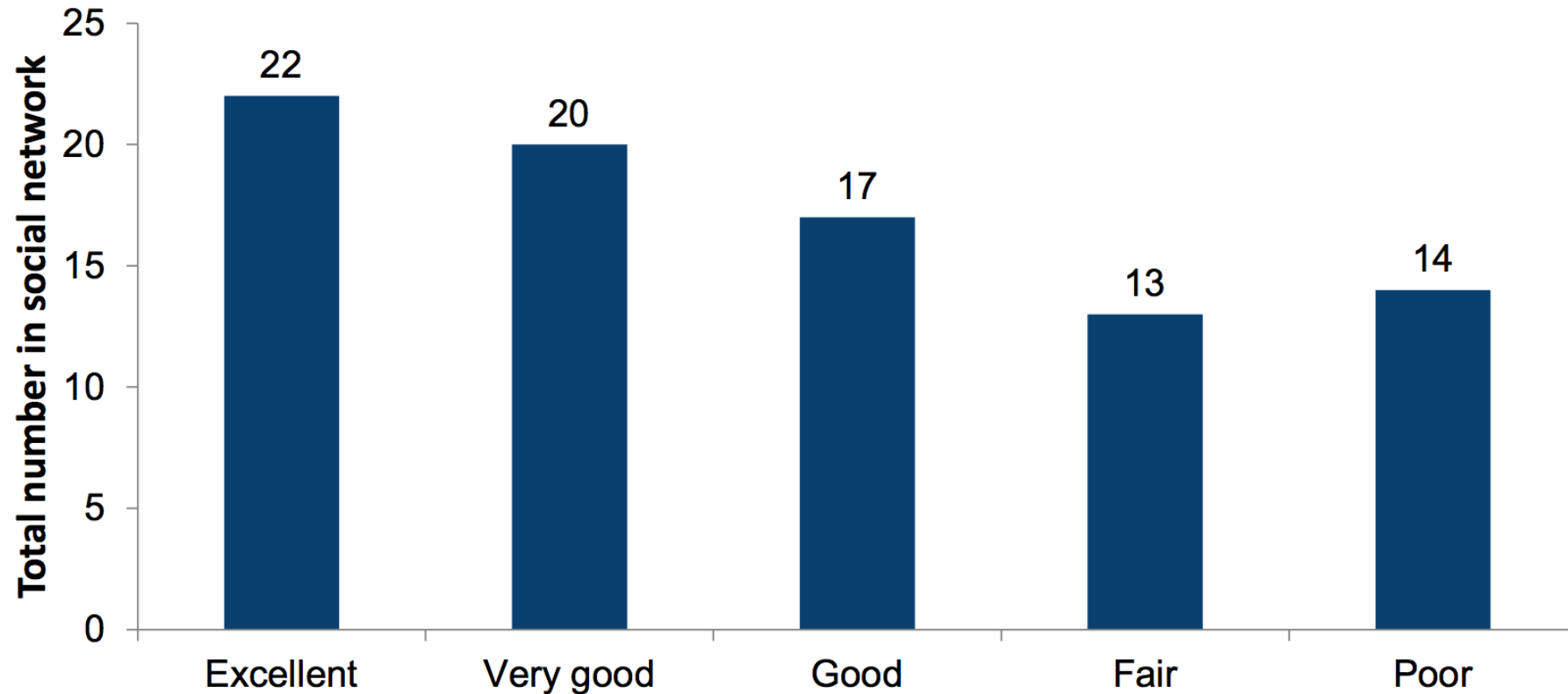
- Higher levels of social integration associated with significantly reduced risk for memory loss and cognitive decline, in some studies by half
- Higher levels of social engagement associated with significantly reduced risk for Alzheimer's disease and dementia
- Reduces rates of loneliness, isolation, and emotional distress

FIGURE 1-- Flexible growth-curve models showing predicted change in memory scores across 6 years of follow-up, by level of social integration at baseline: Health and Retirement Study, United States, 1998-2004



Ertel, K. A. et al. Am J Public Health 2008;98:1215-1220

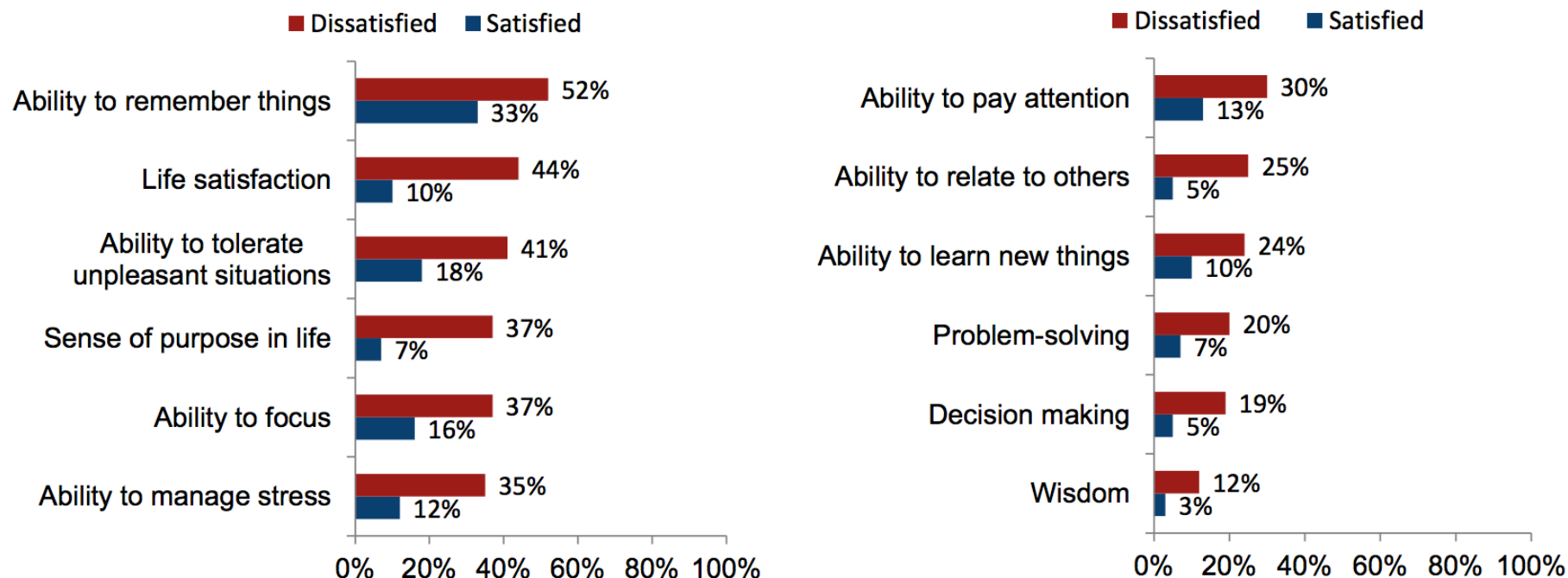
40+ adults with larger social networks self-rate their brain health higher.



-Getting more specific, would you say that your brain health or mental sharpness is excellent, very good, good, fair, or poor?

Significantly more 40+ adults who are dissatisfied with their level of social engagement say their cognitive abilities have decreased in the last five years. Over half (52%) say their ability to remember things has decreased.

Percent who say cognitive characteristics have decreased in the last five years by satisfaction with level of social engagement



-In the past five years, has the following increased, stayed the same, or decreased. Is that a little or a lot?

-In general, how satisfied are you, if at all, with the degree to which you engage socially?



LANCET COMMISSION ON COGNITIVE PREVENTION, INTERVENTION & CARE

- Meta-analysis looking at intervention factors associated with increased dementia risk
- Life course model
- 35% of incident dementia worldwide can be eliminated
- 9 potentially modifiable lifestyle factors across the lifespan
- Midlife and later life factors include hearing loss, social isolation, physical inactivity, smoking, depression

LANCET LIFE COURSE MODEL

9 Risk Factors for Dementia

Birth

7% ApoE4 Allele (*non-modifiable*)

Early Life

8% Less education before age 12 years

Midlife

9% Hearing Loss

2% Hypertension

1% Obesity

Late Life

5% Smoking

4% Depression

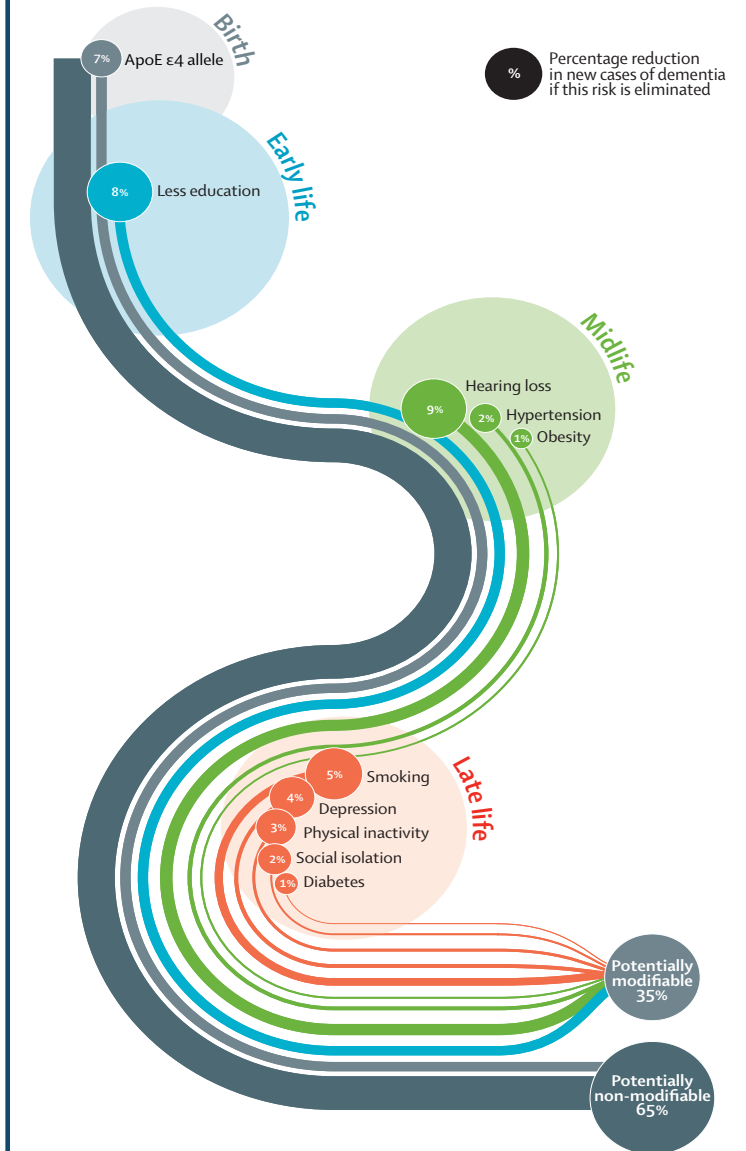
3% Physical Inactivity

2% Social isolation

1% Diabetes

Risk factors for dementia

The Lancet Commission presents a new life-course model showing potentially modifiable, and non-modifiable, risk factors for dementia.





SOCIAL ENGAGEMENT & BRAIN HEALTH | Interventional Research Evidence

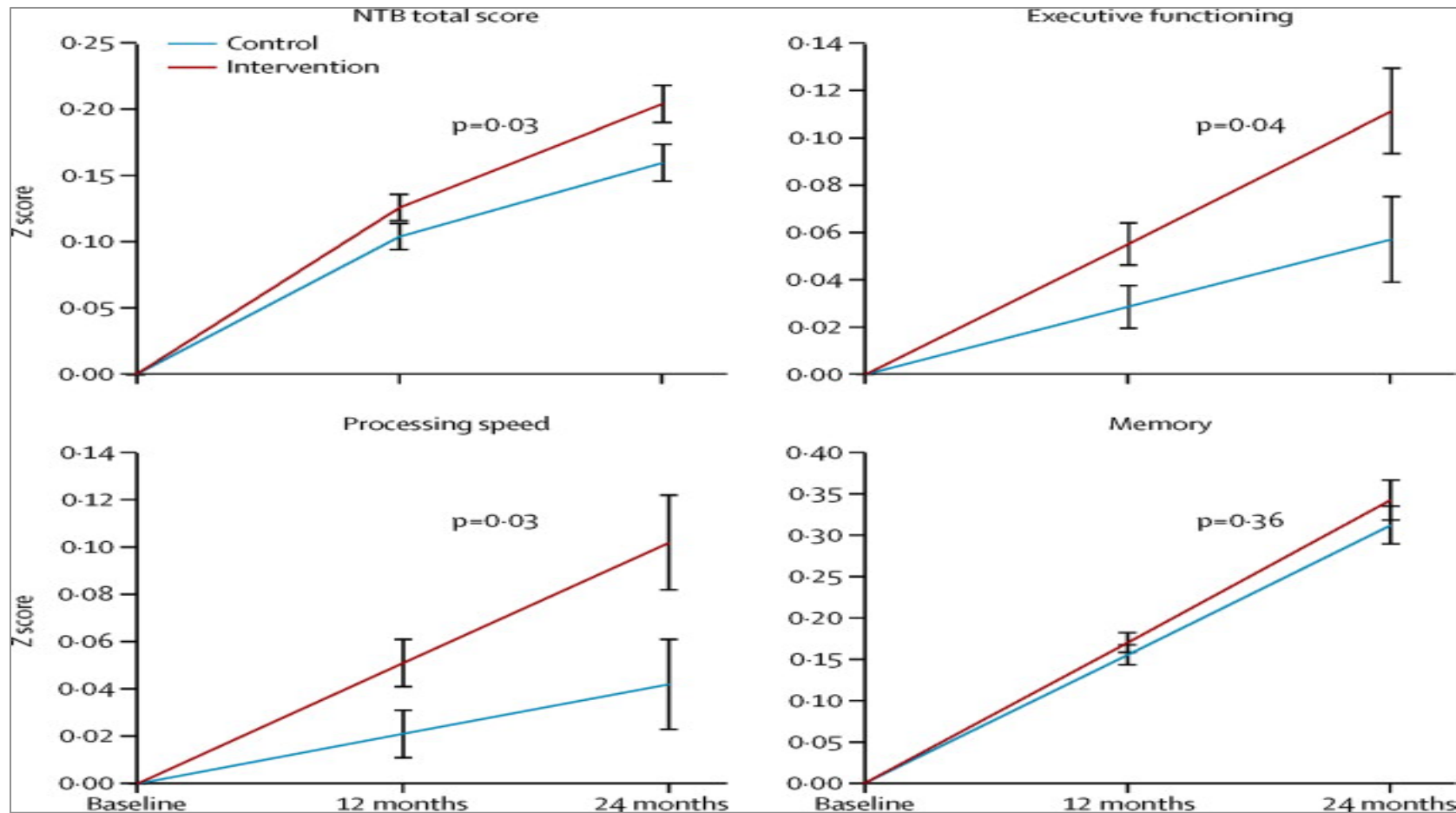
- Social or collective based approach prominent in traditional brain training intervention trials, memory training most predominant intervention studied
- Primary outcome targeted is intellectual performance
- Offers opportunities to maintain intellectual skills that decline with age, such as sustained attention, processing speed, cognitive flexibility, memory, executive control
- Results in higher cognitive self-efficacy outcomes

“Research ... shows that cognitive interventions produce maximum benefits when participants trained in groups.” -- Kelly et al, 2014

FINGER STUDY (2013) | Multimodal cognitive wellness interventions

- Multimodal intervention study in an at-risk sample
- Interventions included physical activity, nutritional counseling, group-based cognitive training and individualized medical management
- Ongoing study; Initial 2-year results released 2013
- **25% higher improvement** in overall cognitive score in active group v control group

“A gold-standard clinical trial provides evidence that diet, exercise and an active social life can help prevent cognitive decline.” -- *Scientific American* 2017



Change in cognitive performance during the 2 year intervention. Figure shows estimated mean change in cognitive performance from baseline until 12 and 24 months (higher scores suggest better performance) in the modified intention-to-treat population.

A 2 year multidomain intervention of diet, exercise, cognitive training, and vascular risk monitoring versus control to prevent cognitive decline in at-risk elderly people (FINGER): a randomised controlled trial. [http://dx.doi.org/10.1016/S0140-6736\(15\)60461-5](http://dx.doi.org/10.1016/S0140-6736(15)60461-5)



“The weight of the evidence suggests that social engagement helps maintain thinking skills and slows cognitive decline in later life.”

- Global Council on Brain Health 2017



POLL QUESTION 1:

WHAT KIND OF BRAIN TRAINING PROGRAM DO YOU THINK WOULD BE SUCCESSFUL IN YOUR SETTING?

- Guided brain training activities that can be done between clients and caregivers, family or friends
- Worksheets clients can complete with the caregiver, family or friends
- A brain training educational workshop that can be used for outreach and marketing
- An online coaching app with expert support from certified brain health trainers and guided daily brain training activities
- Other: _____



SOCIAL ENGAGEMENT IN HOME HEALTHCARE | WHO BENEFITS?

- Benefits to Clients
- Benefits to Caregiver Staff
- Benefits to Organization



SOCIAL ENGAGEMENT IN HOME HEALTHCARE | BENEFITS TO CLIENTS

Increased social engagement can provide ...

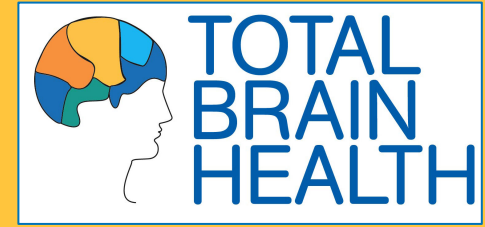
- The chance to maintain or improve cognitive well-being, reduce memory loss
- The opportunity to maintain or improve other aspects of well-being including physical, and emotional health
- The chance to reduce morbidity and mortality risk due to loneliness, isolation
- A better quality of life, with increased overall satisfaction



SOCIAL ENGAGEMENT IN HOME HEALTHCARE | BENEFITS TO CAREGIVERS

Providing social engagement opportunities can provide ...

- Increased professional education and development
- A greater sense of connection with clients, families in their care
- Higher work satisfaction
- Increased opportunities for better self-care



SOCIAL ENGAGEMENT IN HOME HEALTHCARE | BENEFITS TO ORGANIZATION

Providing a social engagement initiative can provide ...

- Leadership in improving cognitive well-being and support overall wellness of clients
- Greater satisfaction among clients, families
- Higher rates of employee readiness, retention
- Differentiation in a competitive marketplace



SOCIAL ENGAGEMENT IN HOME HEALTHCARE | Practical Solutions

- Hearing Loss
- Social-Based Brain Training



HEARING LOSS | An Introduction

- 48 million American adults have hearing loss (HLAA)
- Incidence increases in older adulthood, affecting 1 in 2 adults 74+ years
- 3rd most prevalent chronic health condition affecting older adults
- Only 20% seek treatment
- Increases risk for range of issues including falls, inpatient admissions, cardiovascular disease, social isolation, depression, dementia

HEARING LOSS AND BRAIN HEALTH | Cognitive Impact

- Diminished ability to accurately “read” the environment, cognitive cues
- Diminished sustained attention
- Diminished working memory performance, especially in noisy environments
- Increased “cognitive load”
- Reduced “cognitive spare capacity”



HEARING LOSS AND BRAIN HEALTH | Dementia Risk

- Independently associated with approximately 40% greater cognitive decline
- Associated with accelerated decline + 7 years
- Associated with greater incidence of dementia
- Central hearing loss questioned as a possible precursor to dementia
- May account for up to 9% of incidental dementia seen worldwide



HEARING LOSS AND BRAIN HEALTH | Social Engagement Impact

- Increased isolation, withdrawal
- Increased loneliness
- Decreased self-esteem
- Significantly increased risk for depression, in some studies risk is doubled

HEARING LOSS AND BRAIN HEALTH

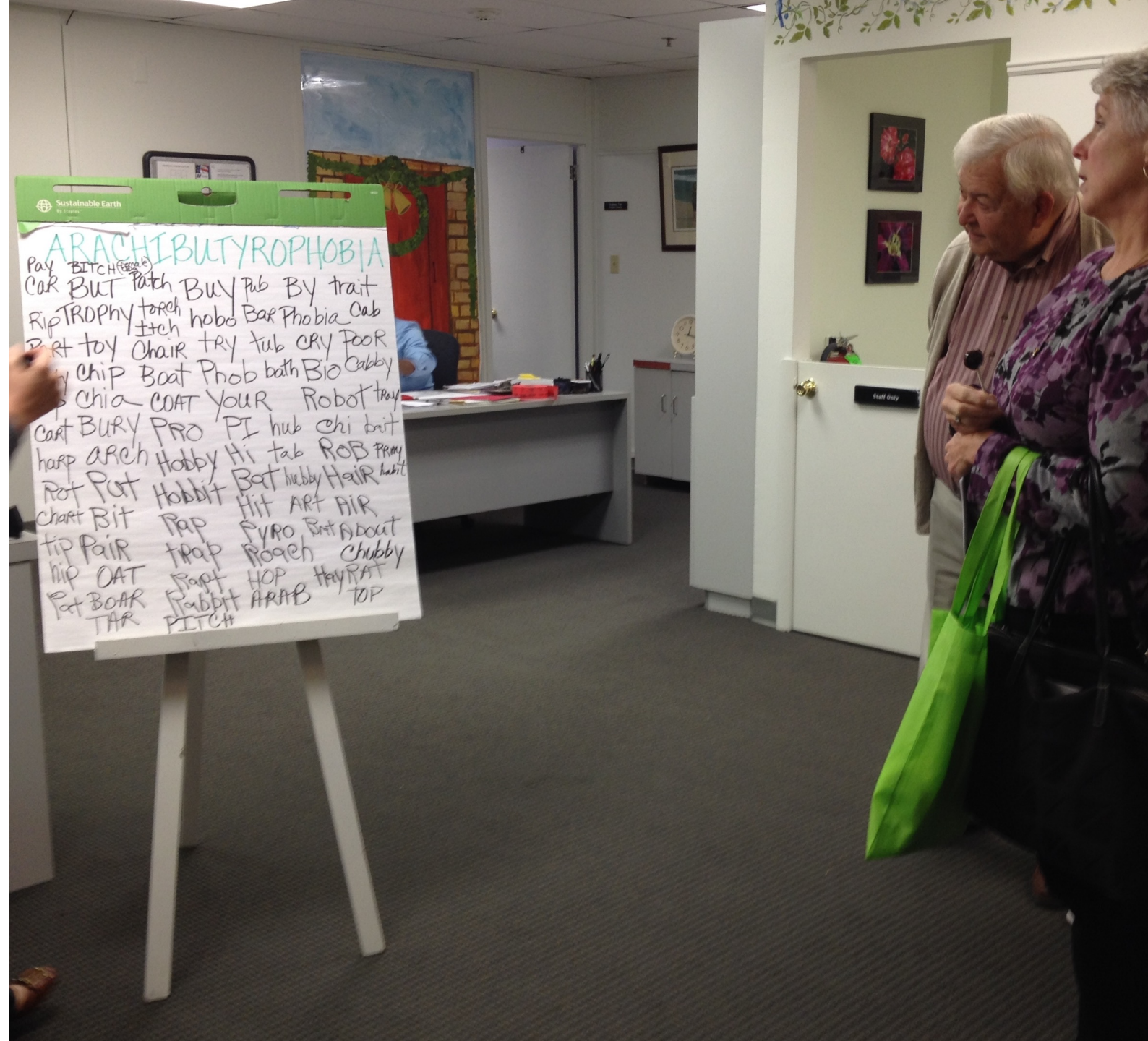
Practical Solutions for Homecare

- Promote hearing health through screening and education
- Educate staff to working with hearing loss for better brain health and successful aging
- Re-think for “hearing-friendly” activities for continued physical, intellectual, social and emotional engagement with hearing loss challenges in mind
- Promote use of technology (hearing aids, captioned devices) to better maintain social connections and personal relationships, emotional well-being
- Monitor for increased levels of withdrawal, depression



What is Social-Based Brain Training?

Social-Based Brain Training (SBBT) is the intentional use of social engagement to promote cognitive performance and long-term brain vitality





SOCIAL-BASED BRAIN TRAINING | Practical Solutions for Homecare

- Provide challenging yet fun SBBT workouts
- Brings benefit of social engagement to cognitive wellness training
- Offers additional opportunities around physical and socio-emotional well-being
- Can be used in home health settings by both professional and personal caregivers
- Get creative! "SBBT-a-Day", technology to engage loved ones, etc.

TBH BRAIN WELLNESS @ HOME

WORKOUT 1 | ATTENTION, ATTENTION!

15 MINUTES



TBH FOCUS

MIND | Sharpen Skills Research shows that brain training can help us better maintain the intellectual skills most challenged by aging and help us stay sharper over time.

BRAIN SKILLS WORKED

- Attention, Visual Skills, Processing Speed

YOU WILL NEED

- A Stopwatch or Timer



LEARN THE SCIENCE

Paying attention—separating out and homing in on important sensory information while pushing away what's not important at the moment—is vital in daily life. We frequently need to stay focused on what we're doing, seeing, and hearing; otherwise we might whiz past our exit on the highway, or miss an important plot point in a movie. Faulty focus can also wreck recall: Research shows we should be able to store between five and nine bits of information in our working memory, but if we're distracted while being presented that information, such as the name of a person we've just met, it's not likely we'll be able to remember it.

Age can also affect focus. Researchers aren't entirely sure why. Changes in vision and hearing may be partly to blame, as are certain lifestyle factors including sleep challenges, illness, and certain medications.

It's possible to maintain and even improve our ability to focus at any age with activities that force us to pay attention in order to do well. Let's try some activities that can help boost our focus and attention together.

TBH BRAIN WELLNESS @ HOME

WORKOUT 1 | ATTENTION, ATTENTION!



NOW DO IT

Let's try some exercises to sharpen our skills.

Try to complete all 3 Exercises in today's TBH Brain Wellness Workout.

Exercise 1 | Did You See That? Use the worksheet to do this activity. You can repeat the activity as frequently as you like in different locations.

Exercise 2 | Found Objects. Use the worksheets to do this activity.

Exercise 3 | A Visual Quilt. Use the worksheets to do this activity.

If you need more time, you can complete the exercises another time.

Be sure to have the client complete the TBH Client Evaluation Form before and after today's session.



VARIATIONS

Adjust the exercises as needed to:

Make It Easier. Work together to answer the questions for the exercises, provide prompts or clues to help.

Make It Harder. Allow less time for more challenge.



THE TAKEAWAY

Review the Takeaway information with your client after you've completed the Workout.

Daily life is filled with situations that require our attention, but it's all too easy to let our minds wander. Keep practicing ways to pay more attention to the information you need to remember each day. Practice focussing on one thing at a time, and exercise your attention with activities like those we did here.

WORKOUT 1 | ATTENTION, ATTENTION!

EXERCISE 1 | DID YOU SEE THAT?

This exercise is called "Did You See That?" It's a fun way to test our attention. In a moment I'm going to ask you to close your eyes. Then, I am going to ask you some questions. Ready? Close your eyes.

Have the person close his or her eyes.

Now, let's see if you can answer a few questions. Just go ahead and call out your answer. Here we go!

Read the questions below, one at a time, leaving time for the person to answer.

- How many light switches are in this room?
- What color shirt am I wearing?
- Is there a wastebasket in the room?
- Are there any signs or pictures on the walls? What do they say?

Have the person open his or her eyes.

Look around the room together and go over the answers to the questions.

That was interesting – and it gives us a really clear idea of what we might be missing when we aren't focused.

For the next part of this exercise, let's do this: First, let's take a few seconds and look around the room. Then when I tell you to do so, close your eyes.

Allow the person 1 minute to look around the room. Then have them close his or her eyes.

Now, let's see if you can answer a few more questions.

Read the questions below, one at a time, leaving time for the person to answer.

- How many windows are in this room?
- Is there a _____ in the room? (Name something in the room)
- How many chairs are in the room?
- What color are the chairs in the room?

OK. Go ahead and open your eyes!

Provide the correct answers once the person is done.

Great – Did you notice a difference between the first and second rounds of this exercise?

Allow a few minutes to discuss their experience of this exercise.

WORKOUT 1 | ATTENTION, ATTENTION!

EXERCISE 2 | FOUND OBJECTS

Study the picture below for 3 minutes. Then, flip the page over. Without looking back at the picture, list as many objects that you can remember from this image. Ready, set....and go!



TBH BRAIN WELLNESS @ HOME WORKOUT 2 | DE-STRESS

15 MINUTES



TBH FOCUS

SPIRIT | *Emotional Balance*. Research shows that mindfulness and meditation can improve brain health, alleviate stress and sharpen daily thinking.

BRAIN SKILLS WORKED

- Attention, Coordination, Executive Control

YOU WILL NEED

- Lowered lighting and reduce background noise to encourage engagement



LEARN THE SCIENCE

When we experience negative emotions, they can have a profound effect on thinking and memory. Stress, which can best be defined as the feeling we can experience when specific events or aspects of our lives feel out of our control, can also take a toll on our thinking.

Emotional challenges are impossible to avoid. And while it's certainly important to deal effectively over the long-term with situations that bring us down or make us anxious, it's also important to do what we can to feel calmer and more in control in the day-to-day.

One of the most effective things we can use to better balance everyday emotional upset and stress is to regularly practice activities that foster relaxation and calm. Things such as getting exercise, doing hobbies we love, speaking with someone such as a friend or therapist, prayer – can all help. Mindfulness activities, such as meditation, can also be very helpful when we're distracted by emotional distress or stress.

Research has shown that people who regularly meditate experience increased blood flow to the brain, as well as improvements in cognitive function, two things that we could all use a bit more of as we age!

One type of meditation that has been studied specifically by researchers is called Kirtan Kriya. In a recent study, researchers found a group trained in the Kirtan Kriya showed significantly more improvement in executive skills and reported fewer depressive symptoms than those who only did a memory wellness class.

Kirtan Kriya sessions only take about 11 minutes to do. It is a low-cost, low-impact way to practice mindfulness and may just get your brain into better shape.

TBH BRAIN WELLNESS @ HOME WORKOUT 2 | DE-STRESS WORKSHEET

KIRTAN KRIYA MEDITATION

In this Workout, we are going to try the Kirtan Kriya Meditation technique. Don't worry if you need a bit of practice. There is no right or wrong way to meditate – and this is something you can keep doing on your own if you like it.

Let's try it together. Ready?

SAA TAA NAA MA

How to do this:

Close your eyes lightly. Focus on the "3rd eye" or the central area of your forehead, slightly above the bridge of your nose.

Touching the tip of each finger with the thumb tip, you chant:

Thumb and first finger - Saa
Thumb and 2nd finger - Taa
Thumb and 3rd finger (ring) - Naa
Thumb and 4th finger (little) - Maa

For 11 minutes:

2 minutes out loud
2 minutes whisper
3 minutes silent
2 minutes whisper
2 minutes out loud

The sounds are chanted repeatedly and in order (i.e. Saa Taa Naa Maa). They come from the mantra "Sat Nam", which means "my true essence".

Continue repeating the sequence always starting with the index finger. The pace between each movement is approximately 1 second per fingertip. To end, inhale, hold the breath for a few seconds, focus the eyes upward, exhale and relax.

How do you all feel? Do you feel more relaxed?

What did you like about Kirtan Kriya meditation? What emotions did you feel while practicing?

“... (G)iving people information about how to prevent or treat dementia is an essential first step, but is not enough. There is a responsibility, not just as professionals but as a society, to implement this evidence into interventions that are widely and effectively used ... Interventions have to be accessible, sustainable, and, if possible, enjoyable or they will be unused.”

-- Lancet Commission on Cognitive Prevention, Intervention and Care (2017)

POLL QUESTION 2:

WHAT OTHER BRAIN HEALTH TOPICS WOULD YOU BE INTERESTED IN LEARNING ABOUT?

- Update on the brain science
- Implementing social-based brain training in the homecare setting
- Brain wellness coaching in the homecare setting
- Other: _____



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