Non-pharmacological Treatment of MCI and Dementia

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UW Project ECHO Dementia

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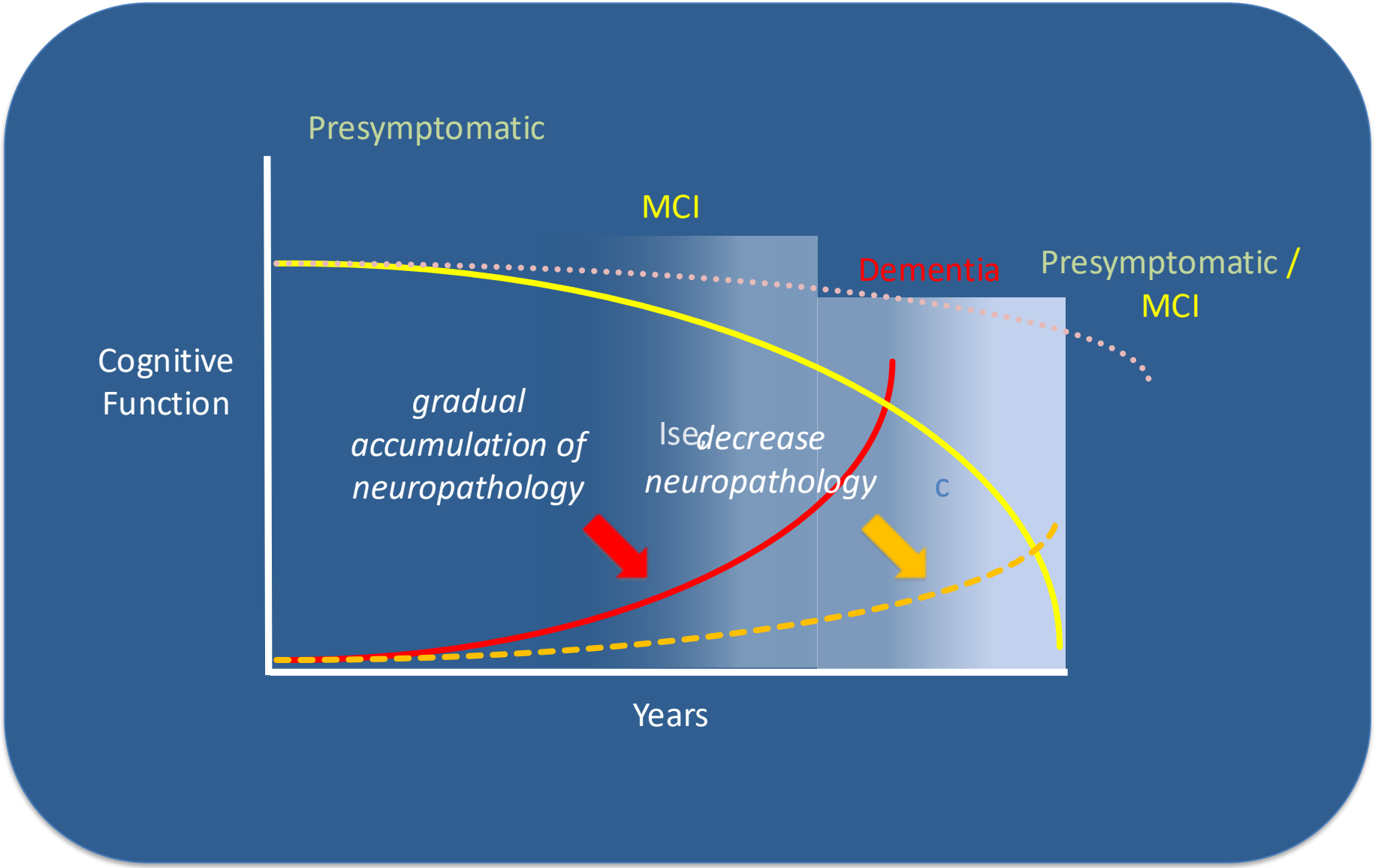
Objectives

1) Increase awareness of risk factors for cognitive impairment and dementia and risk reduction through improved management.

2) Identify lifestyle interventions (i.e., exercise, diet, cognitive stimulation) that have impact on cognition and neurological disease processes, from prodromal phases to early dementia.

3) Identify local, state, regional and national programs and services to improve the quality of life for individuals and families living with dementia.

Treatment Targets

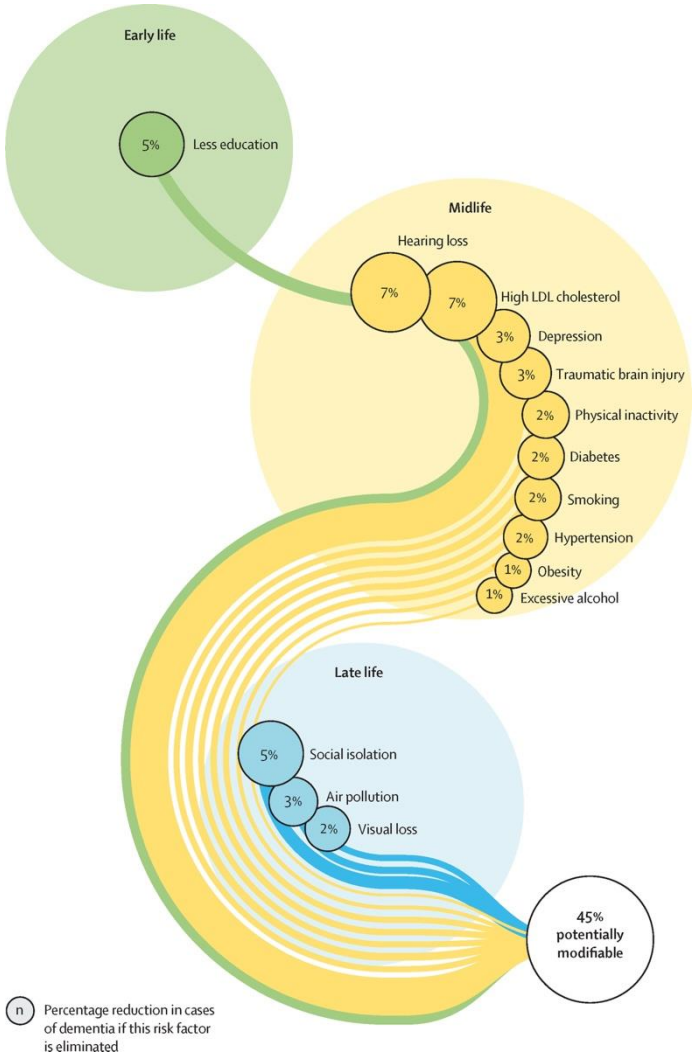


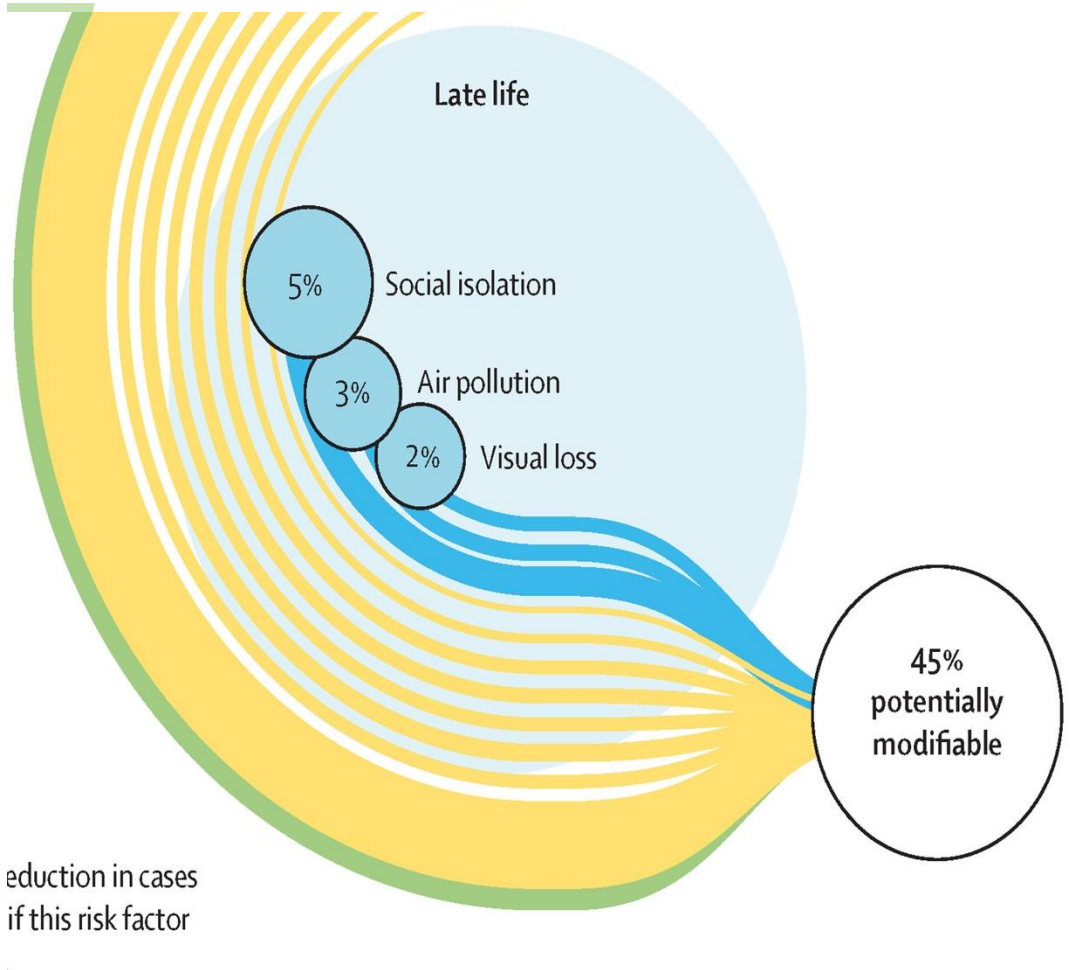
Prevention and Non-Pharmacological Interventions

- Treatment of Modifiable Risk Factors
- Cardiovascular Exercise
- Cognitive Activation and Rehabilitation
- Dietary Interventions
- Optimizing Sleep
- Stress / Distress Management
- Community Engagement / Socialization

Lancet Commission

Dementia Prevention, Intervention, and Care Livingston et al., 2024





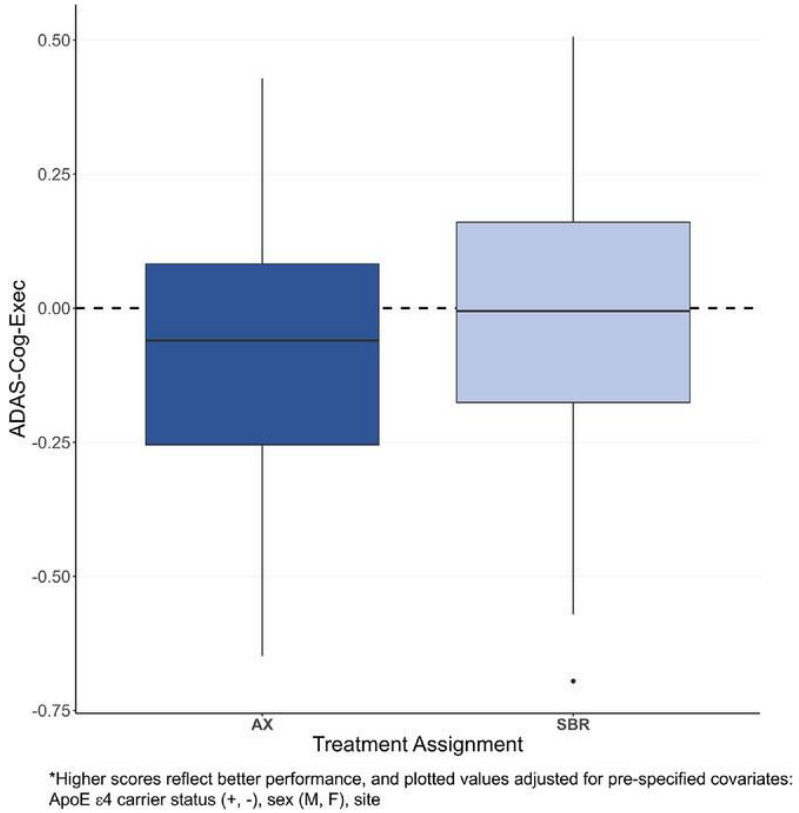
Exercise and Physical Activity and Dementia

- Over 150 meta-analyses in the last 5 years
- Highest quality/most consistent evidence
- Likely multiple mechanisms of action (Wilckens et al., 2021, Hippocampus)
- Likely beneficial in multiple domains
  - Cognition (processing speed, EF>memory) (Wang et al., 2020, Aging)
  - Physical function/mobility/falls (Lai et al., 2019, AM J Phys Med Rehabil)
  - Sleep (O'Caoimh et al., 2019)
  - Neuropsychiatric symptoms (Watt, et al, 2021, BMJ)
- Likely most beneficial in combination with other NPTs

- Pooled effects highest for delaying onset>MCI>dementia
  - Group > individual
  - Across settings, including home-based (de Almeida, 2020, Gerontologist)

Effects of exercise on cognition and Alzheimer's biomarkers in a randomized controlled trial of adults with mild cognitive impairment: The EXERT study

- 296 sedentary older adults with amnestic MCI
  - Aerobic training vs. stretching/balance/range of motion
- Good adherence
  - AX = 81%, SBR = 87%
- No 12-month cognitive decline for either group
- 12-month hippocampal volume loss = 0.51%
- Importance of support/structure
  - Cohort
  - Trainer



Baker et al., 2025, Alz & Dement

Exercise and Physical Activity

- Should be recommended to adults with normal cognition to reduce the risk of cognitive decline.
  - Quality of evidence: moderate
  - Strength of the recommendation: strong

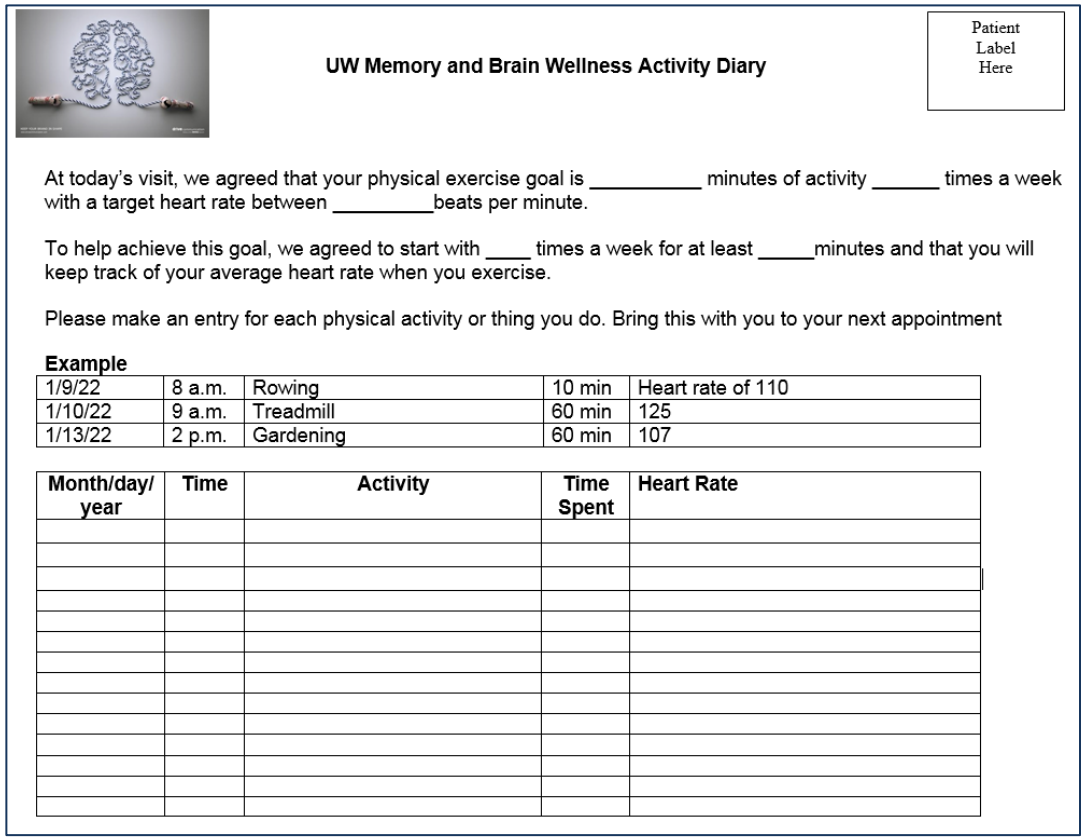
- May be recommended to adults with MCI to reduce the risk of cognitive decline.
  - Quality of evidence: low
  - Strength of the recommendation: conditional

- 150 min of moderate-intensity or 75 min vigorous-intensity /week
  - Double for additional health benefits
- Aerobic activity = 10+ minutes' duration
- Poor mobility = balance and fall prevention on 3+ days/week
- Muscle-strengthening = major muscle groups on 2+ days/week
- Limitations = as physically active as abilities and conditions allow

World Health Organization, 2019

How to Implement

- Scheduling and structure
- Create accountability
  - Classes
  - Exercise partner(s)
  - PT/Trainer
  - Exercise Diaries
  - FitBit/exercise trackers
  - Check in calls
- Program for variability and engagement
- Graduated, well-paced incremental increases
- Motivational interviewing/enhancement
  - “You know why I want you to exercise, why do you want to?”
  - “From ‘not at all’ to ‘very,’ how likely are you to _____? What would get you to ‘very’?”



UW Memory and Brain Wellness Activity Diary

Patient Label Here

At today’s visit, we agreed that your physical exercise goal is _____ minutes of activity _____ times a week with a target heart rate between _____beats per minute.

To help achieve this goal, we agreed to start with ____ times a week for at least _____minutes and that you will keep track of your average heart rate when you exercise.

Please make an entry for each physical activity or thing you do. Bring this with you to your next appointment

Example

1/9/22	8 a.m.	Rowing	10 min	Heart rate of 110
1/10/22	9 a.m.	Treadmill	60 min	125
1/13/22	2 p.m.	Gardening	60 min	107

Month/day/ year	Time	Activity	Time Spent	Heart Rate

Cognitive training for Alzheimer's disease and other forms of dementia: Insights from a systematic review and Bayesian meta-analysis

Journal of Alzheimer's Disease
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https://doi.org/10.1177/13872877251334795

Sage Journals

Regular Section - Systematic Review

Cognitive training for Alzheimer's disease and other forms of dementia: Insights from a systematic review and Bayesian meta-analysis

Francesco Giaquinto[1], Marika Iaia[1], Ezia Rizzi[2], Luigi Macchitella[3], Daniele Luigi Romano[2], Giorgia Tosi[2,*], and Paola Angelelli[1,*]

Background The prevalence of individuals living with mild cognitive impairment (MCI), Alzheimer's disease (AD), and other forms of dementia is globally increasing. Four out of nine international clinical guidelines recommend non-pharmacological cognitive interventions to enhance cognition, independence, and wellbeing. However, the effectiveness of cognitive rehabilitation (CR) and cognitive training (CT) for individuals with MCI and AD and other forms of dementia is still debatable, often due to significant heterogeneity among studies.

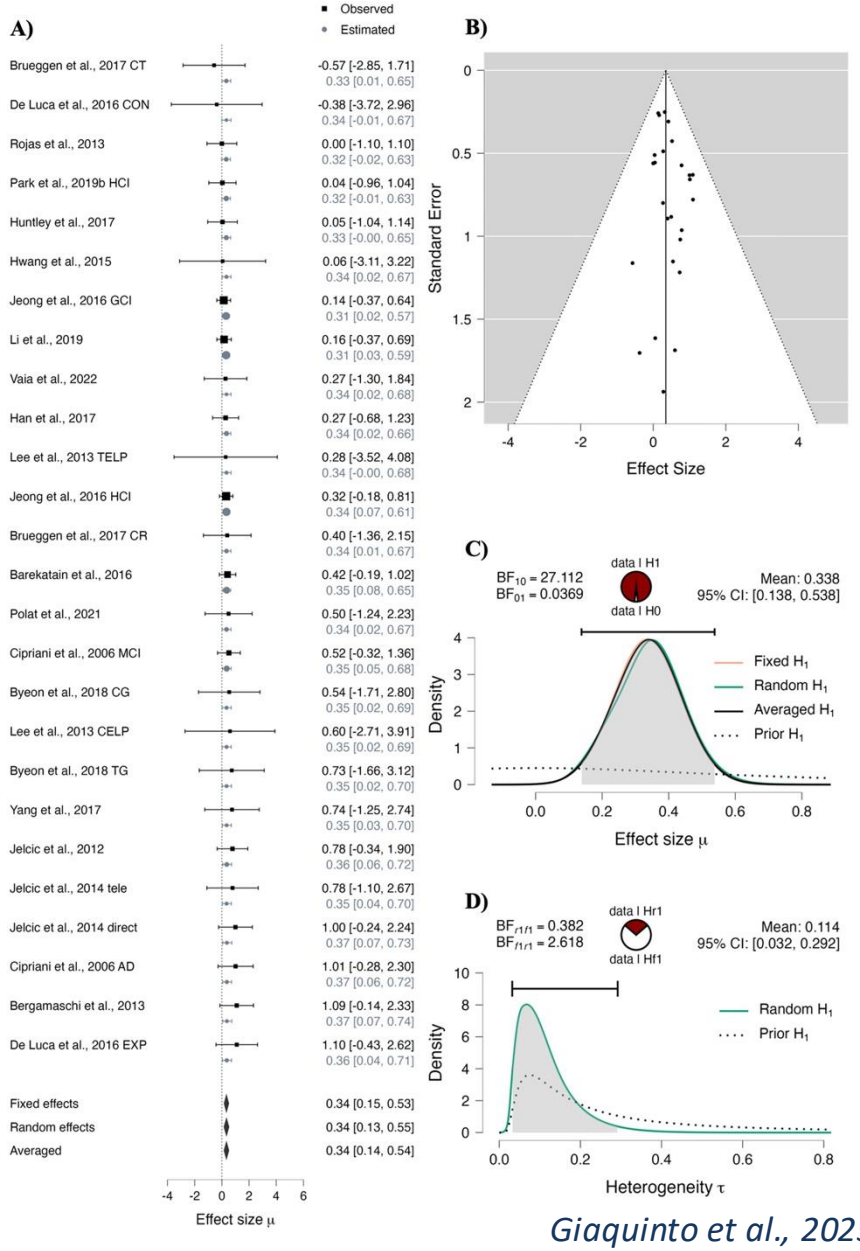
Objective This study aims to assess the effectiveness of CT and CR in these populations.

Methods Following PRISMA guidelines, we conducted a comprehensive literature search across databases including OVID, MEDLINE, EMBASE, and Scopus, identifying randomized controlled trials and non-randomized pre-post intervention studies. The Bayesian meta-analysis focused on pre-post changes in global cognition, quality of life, everyday functioning, and depression, avoiding comparisons with control groups to reduce heterogeneity (PROSPERO: CRD42022365038).

Results The search yielded 6075 results, with 40 studies meeting inclusion criteria, encompassing 50 independent trials. CT and people with AD and other dementias are the best represented intervention and population, respectively. CT was more effective in improving global cognition in individuals with AD and other dementias, and paper-and-pencil and face-to-face formats yielded greater benefits. The analysis showed a significant susceptibility to bias among the studies.

Conclusions Limitations in outcome measure (e.g., MMSE) suggest the need for more sensitive assessments, especially for MCI. Future research should explore broader aspects of wellbeing and investigate the potential of CR. Policymakers are encouraged to consider these findings when designing cognitive interventions for this population.

Keywords
Alzheimer's disease, Bayesian analysis, cognitive rehabilitation, cognitive training, dementia, everyday function, meta-analysis, mild cognitive impairment, neuropsychological tests, quality of life



Giaquinto et al., 2025, Alz & Dement

How to Implement

- Engaging in a variety of activities that challenge memory, language, spatial reasoning, attention, etc.
  - Tasks emphasizing processing speed may most helpful (Rebok et al, 2014, JAGS)
- The difficulty should be adjustable to gently but consistently push your skills (without being too frustrating or discouraging)
- Activities done as a group or with a partner
- Activities that involve new learning (i.e., a new card game, language, instrument, lecture series)
- At least a hour a day of things that keep your mind active, like reading, socializing, games
- Some pre-packaged, computerized programs include:
  - Posit Science / Brain HQ - https://www.brainhq.com/
  - Lumosity - https://www.lumosity.com/
  - AARP Brain Games - https://stayingsharp.aarp.org/about/brain-health/games/

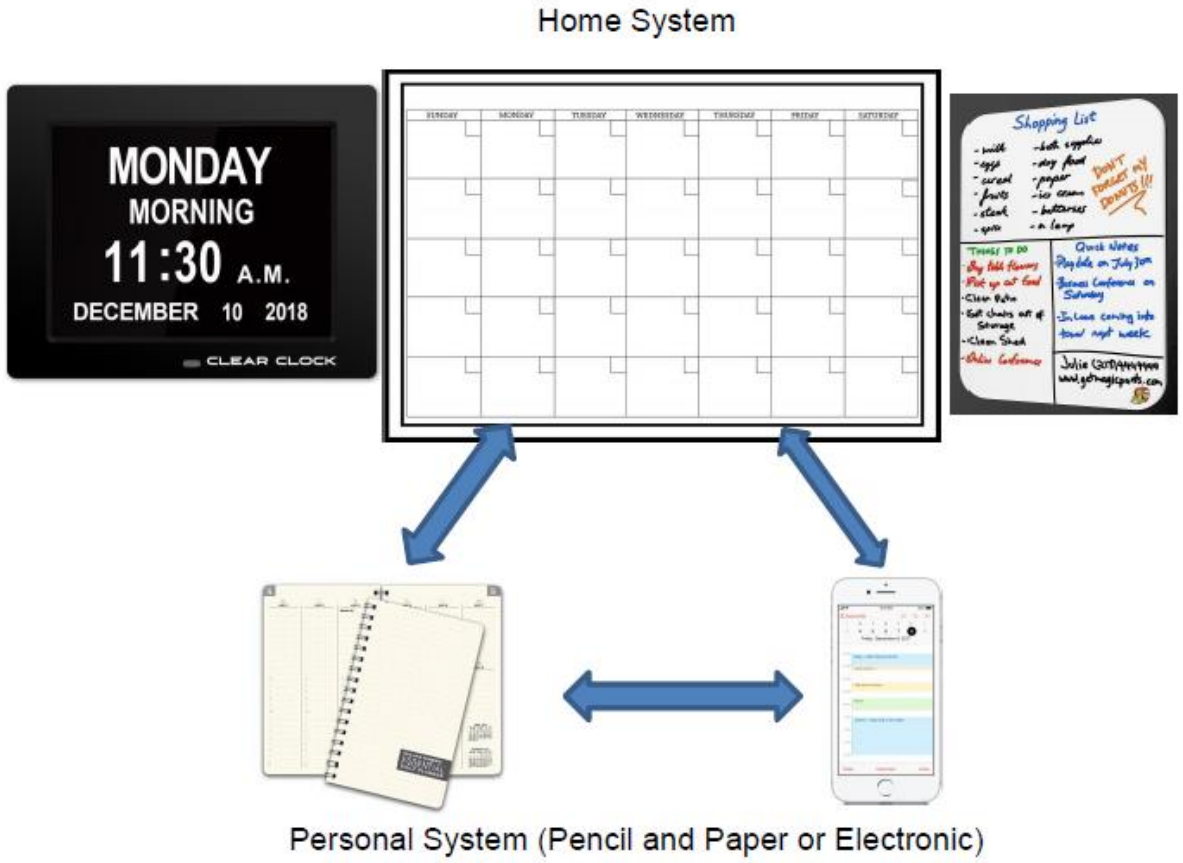
Cognitive Rehabilitation

- Restitution vs. Compensation

- Internal vs External Strategies
  - Encoding
    - Mnemonic
    - Chaining (forward/backward)
    - Chunking
    - Errorless learning
  - Storage
    - PQRST
    - Spaced retrieval
  - Retrieval
    - Cues/prompts
    - Recognition strategies

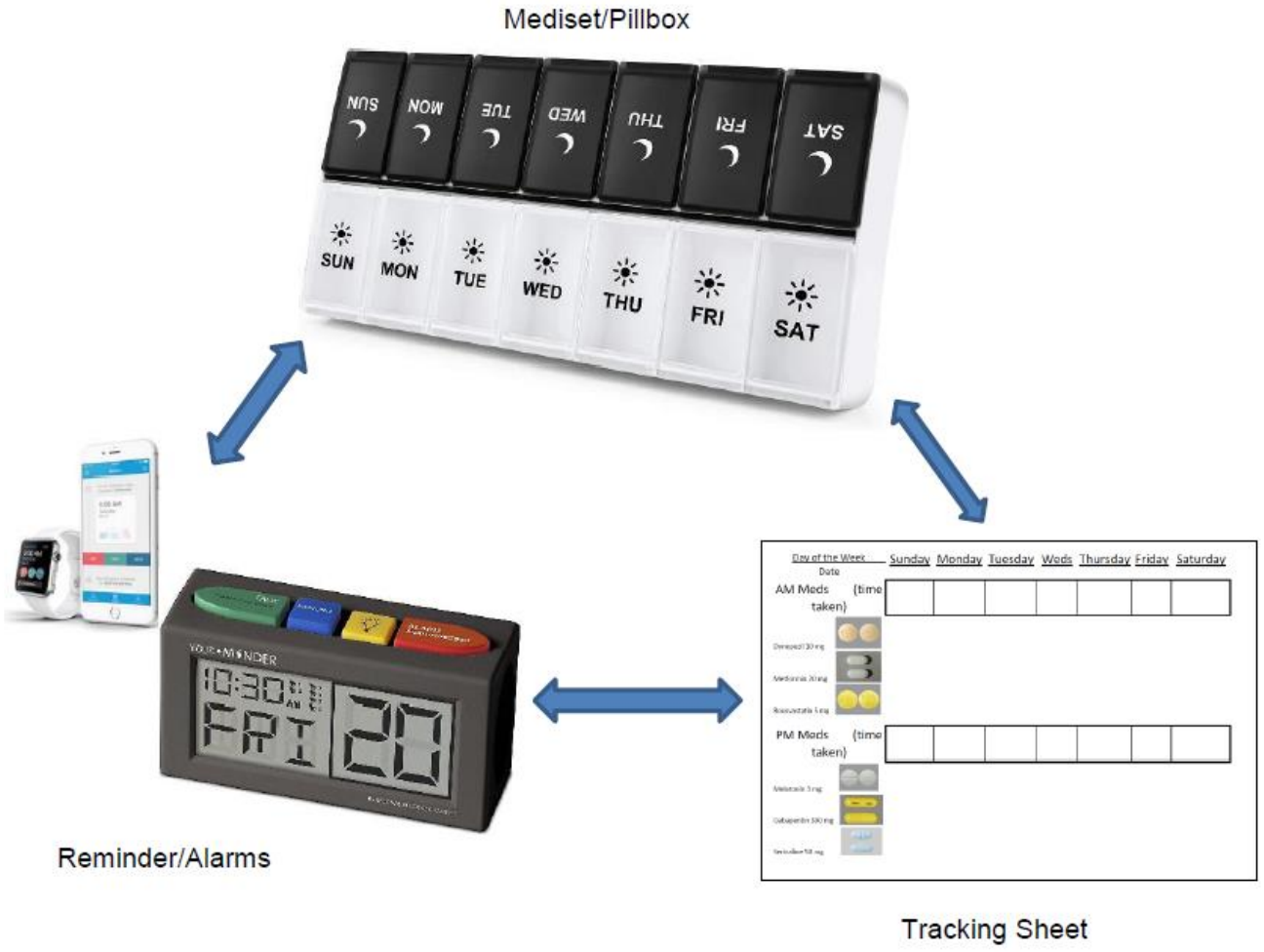
Cognitive Rehabilitaiton: Scaffolding

- External devices include:
  - Information display items
    - Clocks, calendars, digital photo frames
  - Electronic reminders
    - Phones, pagers, pillboxes
  - Location detection devices
    - Electronic tagging
  - Way-finding
    - GPS, architectural design
  - Electronic storage
    - PDA, mobile phone
  - Diaries, organizers, Filofaxes
  - Storage devices



Memory Rehabilitation - Combined

- Compensatory System
  - Mediset
  - Pill reminders/alarms
  - Tracking Sheet
  - Incorporate other tools/techniques
    - Calendar
    - Errorless learning
    - Location of practice



How to Implement

- Referral to SLP/cognitive rehabilitation/OT/therapist
- Critical importance of a care partner
  - Follow through
  - Carryover
  - Generalization/adaptation
- Capitalizing on previously used tools
- Shopping for the right version of the tool
- Recruit the family or friend tech support person
- Pick one area/intervention at a time
- Stress the importance of practice and need for time

Diet and Dementia Risk

Table 1. Medi/DASH/MIND dietary components and potential neuroprotective benefits.

Dietary Component	Vascular Protection	Anti-Inflammatory Protection	Antioxidant Protection	Neural Protection
Whole Grains [2,13,29,41–46]	X	X	X	X
Vegetables (MIND diet emphasizes leafy greens in addition to other vegetables) [2,29,39,41–47]	X	X	X	
Fruits (MIND diet emphasizes berries over other fruits) [2,29,39,41–47]	X	X	X	
Fatty Fish (e.g., salmon, tuna, sardines) [2,13,14,31,41,42]	X	X	X	X
Legumes/Beans [2,41,45,48]	X	X	X	X
Nuts [2,29,41,46,47]	X	X	X	X
Olive Oil (Medi, MIND diets) [33,49,50]		X	X	
Red Wine (Medi, MIND diets) [29,46,49,51–53]		X	X	

"X" indicates association with the neuroprotective benefit listed.

Duplantier & Gardner CD, 2021, Nutrients

Diet and Dementia Risk

Table 2. Comparison of Mediterranean, DASH, and MIND dietary components. The components in bold are common across all three dietary patterns.

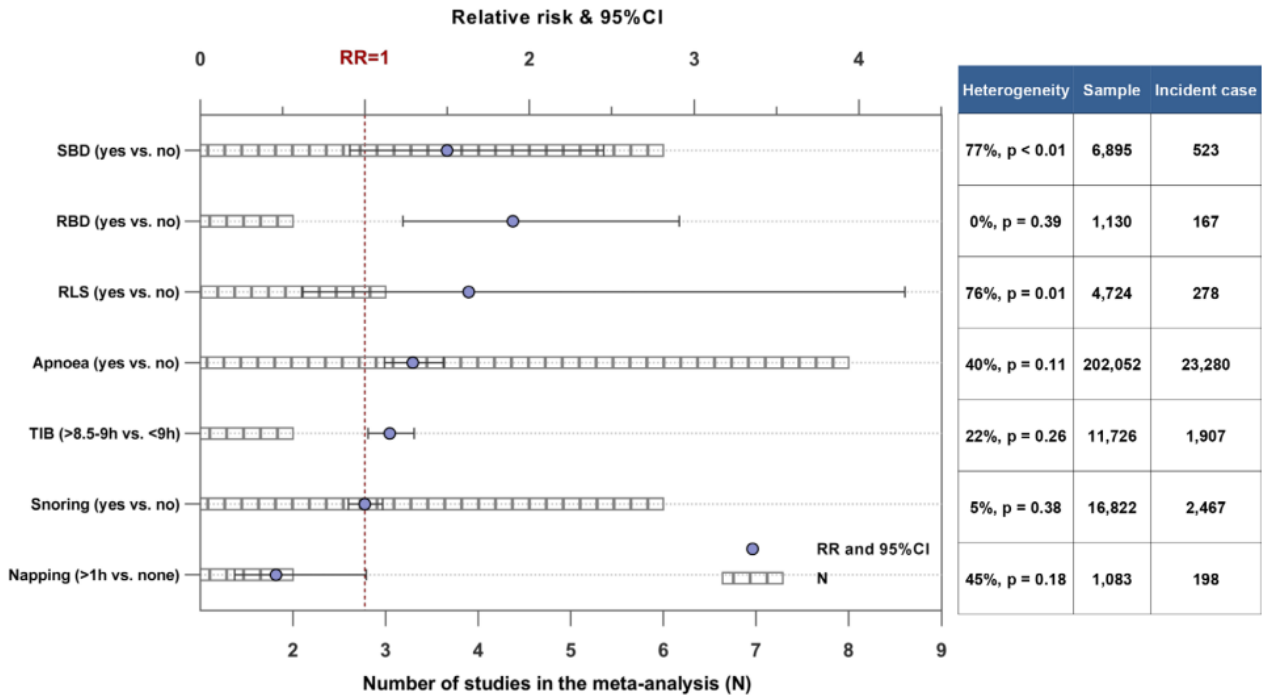
	Mediterranean [17,54,55]	**DASH** [56,57]	**MIND** [17]
HIGH AMOUNTS	Olive Oil (exclusive)	-	-
	Fish	-	-
	Grains (non-refined)	**Grains**	**Grains** (whole)
	Fruits	Fruits	Berries
	Vegetables	**Vegetables**	Green leafy vegetables
	-	-	**Other vegetables**
	Potatoes	-	-
	Legumes	Legumes	-
	Beans	-	Beans
	Nuts	**Nuts**	**Nuts**
	Seeds	Seeds	-
	-	Low-fat diary	-
MODERATE AMOUNTS	**Poultry**	**Poultry**	**Poultry**
	-	**Fish**	**Fish**
	Alcohol	-	Alcohol
	-	-	Olive oil (primary)
	Full-fat dairy	-	-
SMALL AMOUNTS	**Red meat**	Red meat	**Red meat**
	Processed meat	-	-
	Sweets	**Sweets**	**Sweets/pastries**
	-	Saturated fat as a % of total fat	-
	-	Sodium <2400 mg/d	-
RESTRICTED	-	-	Cheese
	-	-	Butter/margarine
	-	-	Fast/fried foods

How to Implement

- Assess needs/preferences/willingness of others
  - Especially the grocery shopper
- Referral to dietician/nutritionist
- Consider incremental changes
- Harm reduction model
- Pre-packaged meals
- Consider different textures, spices, plate to food contrast
- Importance of routines, consistent table settings
- Consider involving company or family
- Offering limited choices
  - “Do you want broccoli or spinach?”

Sleep and Dementia Risk

- Association between sleep-related problems and cognitive disorders
  - REM behavioral disorder
  - Sleep apnea
  - Longer time in bed
  - Habitual napping



Heterogeneity	Sample	Incident case
77%, p < 0.01	6,895	523
0%, p = 0.39	1,130	167
76%, p = 0.01	4,724	278
40%, p = 0.11	202,052	23,280
22%, p = 0.26	11,726	1,907
5%, p = 0.38	16,822	2,467
45%, p = 0.18	1,083	198

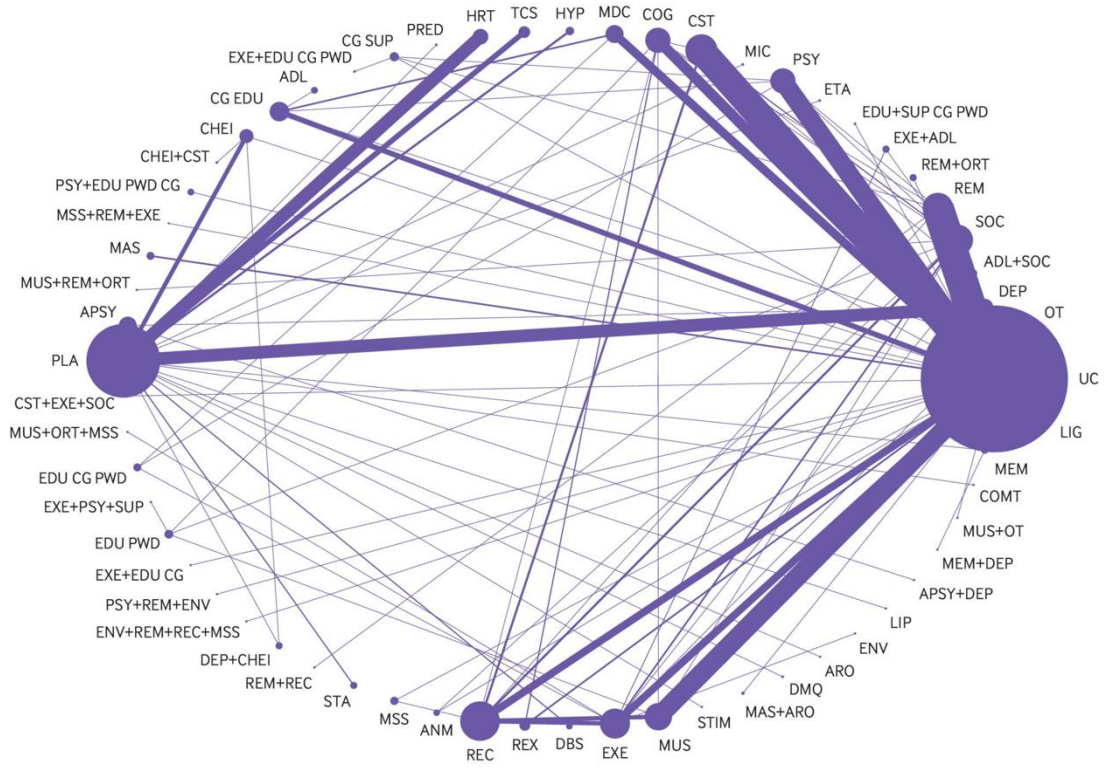
Xu W, et al., 2020 J Neurol Neurosurg Psychiatry

How to Implement

- Sleep hygiene/habits
  - Establish consistent sleep and wake times
  - Importance of a wind-down routine
  - Avoiding screens (30-45 min before bed)
  - Avoid caffeine and alcohol (4-6 hours before bed)
  - Exercise (earlier in the day)
  - Quiet, cool, dark room
  - Bedroom is for sleeping and sex only
  - Avoid or program naps
  - Avoid pets in the bed
  - Sleep restriction
- Referral for CBT-I
  - Associations with anxiety, depression, QOL
  - Effective in MCI, early stage dementia (Blackman et al., 2021; Jin et al., 2021)

Non-pharm Treatment of Depression in Dementia

- 61 interventions across 213 studies (N = 25,177)
- Mild to moderate dementia with and without MDD
- 10 interventions with high probability of a meaningful change
  - Exercise combined with social interaction and cognitive stimulation
  - Psychotherapy combined with reminiscence therapy and environmental modification
  - Cognitive stimulation and a cholinesterase inhibitor
  - Cognitive stimulation
  - Animal therapy
  - Reminiscence therapy
  - Exercise
  - Massage and touch therapy
  - Multidisciplinary care
  - Occupational therapy



Watt, et al, 2021, BMJ

Mindfulness Meditation and MCI

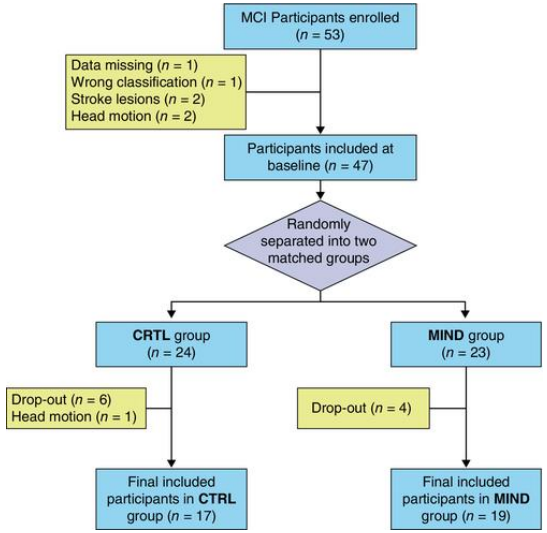
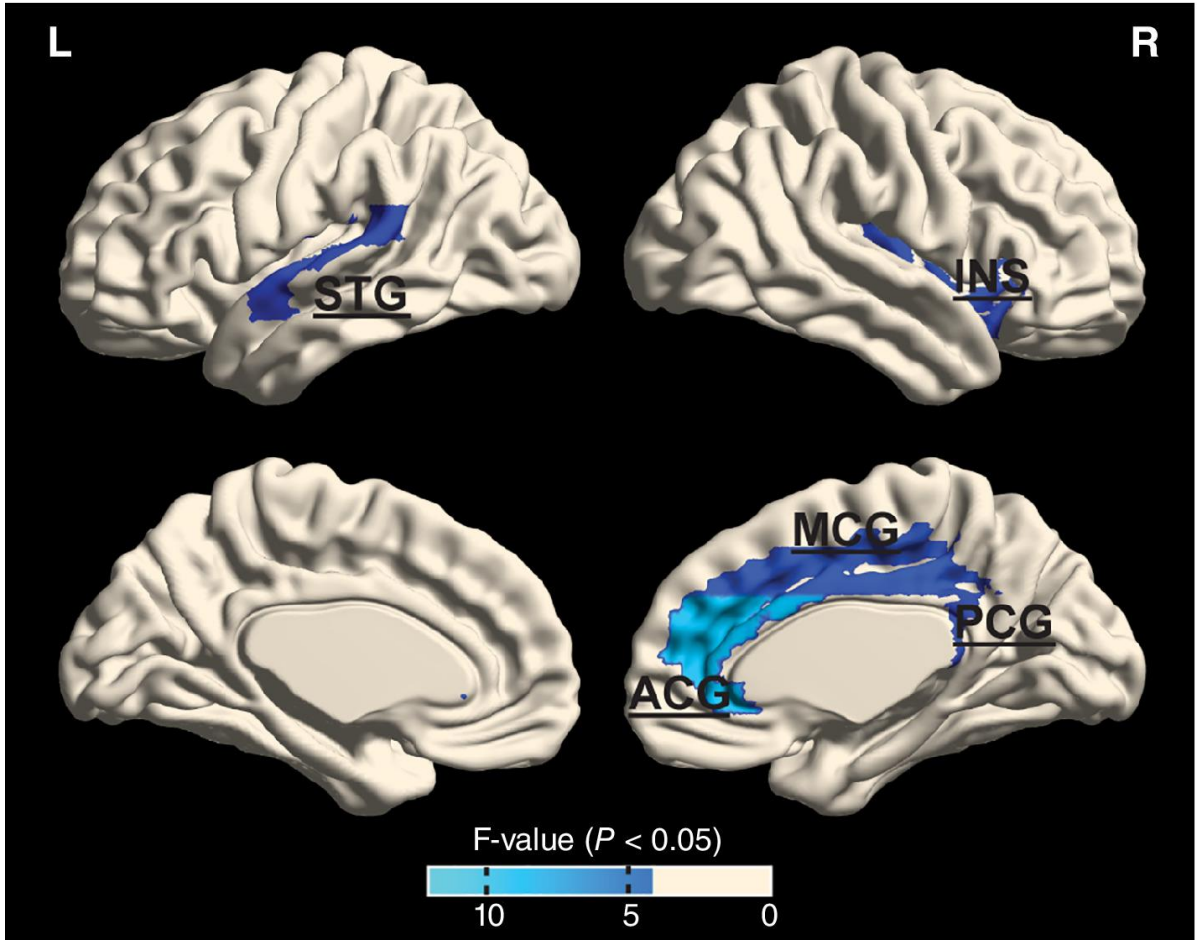


Table 2. Effects of mindfulness practice on the neurocognitive measures and temporal network metrics

	Two-way repeated ANOVA		
Metrics	Group effect $F_{1,34}$ (*P*-value)	Time effect $F_{1,34}$ (*P*-value)	Interaction $F_{1,34}$ (*P*-value)
Neurocognitive measures			
MMSE	0.925 (0.343)	0.006 (0.940)	0.090 (0.766)
RAVLT	**5.938 (0.020)** ↓	**17.092 (<0.001)** ▲	1.239 (0.273)
Delayed recall			
RAVLT Recognition	0.371 (0.546)	2.387 (0.132)	**4.545 (0.040)**
Block design	2.502 (0.123)	**4.278 (0.046)** ▲	0.807 (0.375)
Temporal network metrics			
E^f_{glb}	3.401 (0.074)	0.001 (0.970)	**6.429 (0.016)**
E^f_{loc}	0.005 (0.953)	**6.405 (0.016)** ▲	0.088 (0.768)

Note: Significant effects ($P < 0.05$) were highlighted by the bold text. ↓ indicates MIND < CTRL; ▲ indicates Pre- < Post-intervention.



Fam, et al, 2020, Psychiatry Clin Neurosci

Effects of Mindfulness Training on Depression and Cognition in Older People With Mild Cognitive Impairment: A Systematic Review and Meta-Analysis

Journal of the American Geriatrics Society

Journal of the
American Geriatrics Society

REVIEW ARTICLE

Effects of Mindfulness Training on Depression and Cognition in Older People With Mild Cognitive Impairment: A Systematic Review and Meta-Analysis

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Keywords: aged | cognition | mental health | older people | rehabilitation

ABSTRACT

Background: This systematic review and meta-analysis aimed to evaluate the efficacy of mindfulness-based treatments for older people with mild cognitive impairment (MCI) who also experience depression and cognitive difficulties.

Methods: Seven databases were searched: PubMed, EBSCOhost, CINAHL Complete, Cochrane Library, ProQuest, Scopus, and Web of Science, up to July 2025. PRISMA guidelines, the Oxford Centre for Evidence-Based Medicine scale, the RoB 2 tool, and GRADEpro were employed to evaluate the methodological quality and evidence reliability. The review plan was pre-registered in the PROSPERO database (CRD420251080874).

Results: Initially, 1738 records were identified in the databases. Thirteen studies that met the inclusion criteria were included in the analysis. The PICOS framework was employed for the subsequent analysis. The meta-analysis indicated that participants receiving mindfulness therapies experienced a significant reduction in depression symptoms, as assessed by the Geriatric Depression Scale (GDS, $p=0.045$). In contrast, the Montreal Cognitive Assessment ($p=0.061$) and the Mini-Mental State Examination ($p=0.713$) did not demonstrate statistically significant changes in cognitive ability.

Conclusions: The findings suggest that mindfulness-based training may reduce depressive symptoms in older individuals with MCI; however, the impact on cognitive abilities remains inconclusive.

1 | Introduction

The global population of older people has been growing rapidly, reaching 962 million individuals during 2017 (13% of the world population). Projections indicate a continued increase, with numbers expected to reach 1.4 billion by 2030, 2.1 billion by 2050, and 3.1 billion by the year 2100 [1]. Aging is strongly associated with a range of health conditions, particularly neurodegenerative disorders and mild cognitive impairment (MCI), which implies significant challenges to both lifespan

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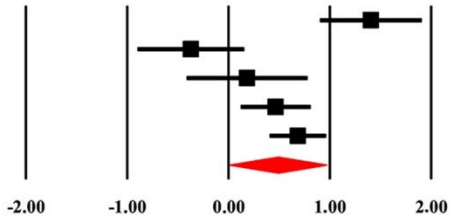
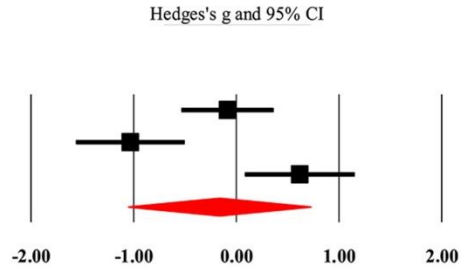
A

Study name	Hedges's g	Standard error	Variance	Lower limit	Upper limit	Z-Value	p-Value
Cai et al. (2022)	1.405	0.256	0.065	0.904	1.906	5.494	0.000
Klainin-Yobas et al. (2019)	-0.372	0.268	0.072	-0.898	0.154	-1.387	0.166
Larouche et al. (2019)	0.183	0.304	0.092	-0.413	0.778	0.602	0.547
Marchant et al. (2025)	0.465	0.176	0.031	0.121	0.809	2.652	0.008
Lee et al. (2021)	0.684	0.142	0.020	0.406	0.962	4.822	0.000
	0.488	0.243	0.059	0.011	0.965	2.003	0.045



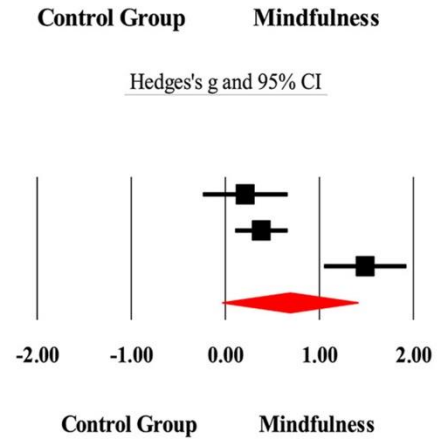
B

Study name	Hedges's g	Standard error	Variance	Lower limit	Upper limit	Z-Value	p-Value
Cai et al. (2022)	-0.086	0.229	0.052	-0.534	0.362	-0.377	0.707
Jiayuan et al. (2022)	-1.033	0.270	0.073	-1.561	-0.504	-3.831	0.000
Klainin-Yobas et al. (2019)	0.618	0.272	0.074	0.084	1.151	2.268	0.023
	-0.167	0.453	0.205	-1.055	0.721	-0.368	0.713



C

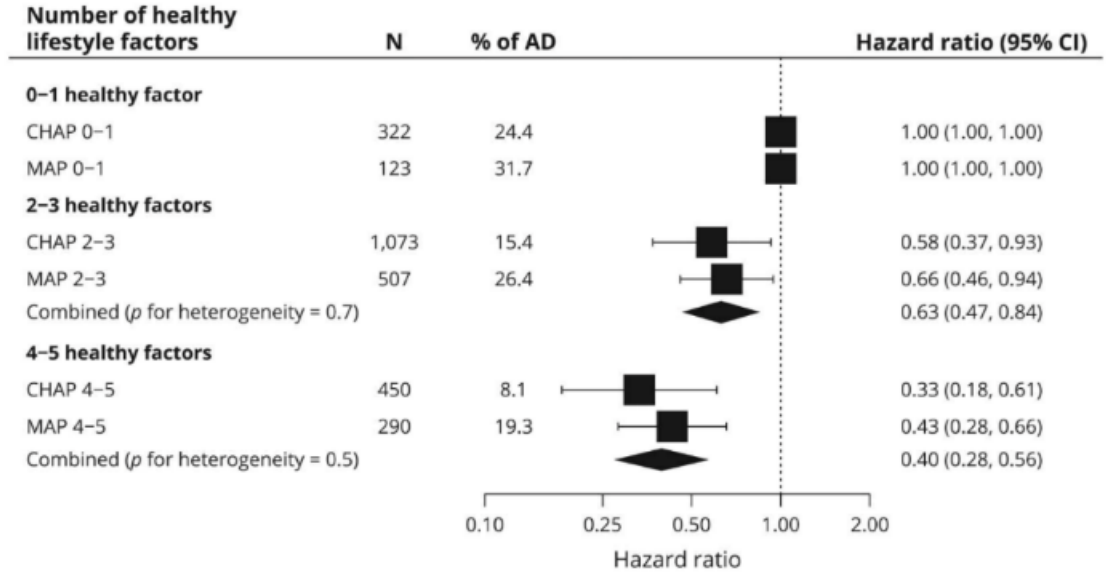
Study name	Hedges's g	Standard error	Variance	Lower limit	Upper limit	Z-Value	p-Value
Cai et al. (2022)	0.212	0.229	0.053	-0.237	0.661	0.924	0.355
Lee et al. (2021)	0.384	0.141	0.020	0.108	0.660	2.725	0.006
Ren et al. (2021)	1.487	0.222	0.049	1.051	1.923	6.686	0.000
	0.688	0.366	0.134	-0.031	1.406	1.876	0.061



The Importance of Lifestyle

- Combining multiple healthy lifestyle factors may be more impactful for reducing dementia risk
  - Healthy diet
  - Moderate to vigorous physical activity
  - Light to moderate alcohol intake
  - Stopping smoking
  - Cognitive stimulation
- 4 or 5 = 59% lower risk
- 2 or 3 = 39% lower risk
- May offset genetic risk

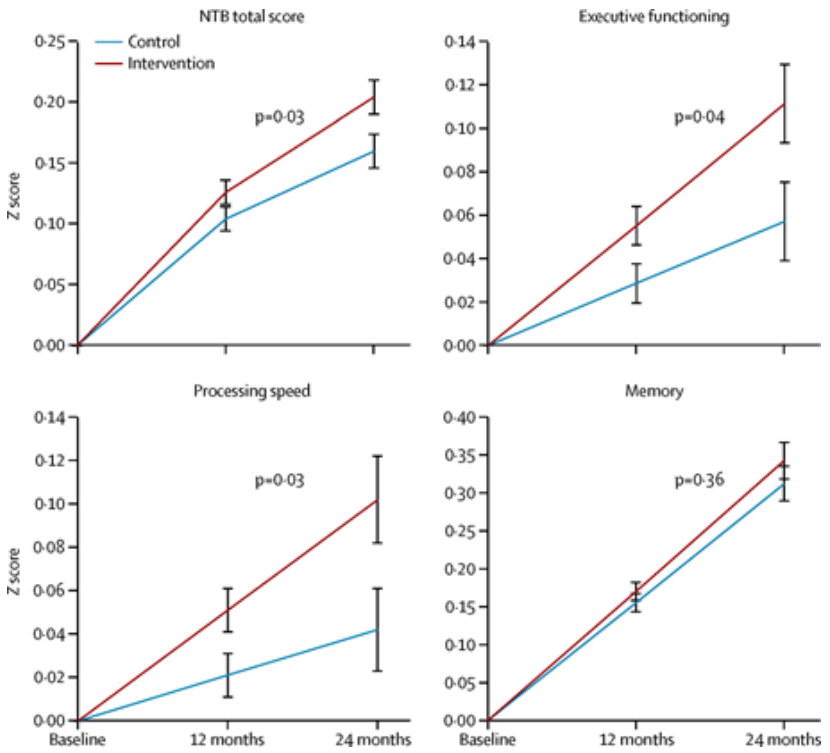
Figure HRs of AD according to the combination of healthy lifestyle factors in the prospective cohort studies



Model adjusted for age, sex, race, education, *APOE* ε4, and prevalence of cardiovascular disease (including heart disease or stroke). A random-effects meta-analysis was used to combine cohort-specific results. AD = Alzheimer dementia; CHAP = Chicago Health and Aging Project; CI = confidence interval; HR = hazard ratio; MAP = Rush Memory and Aging Project; N = number of participants in each group.

FINGER study

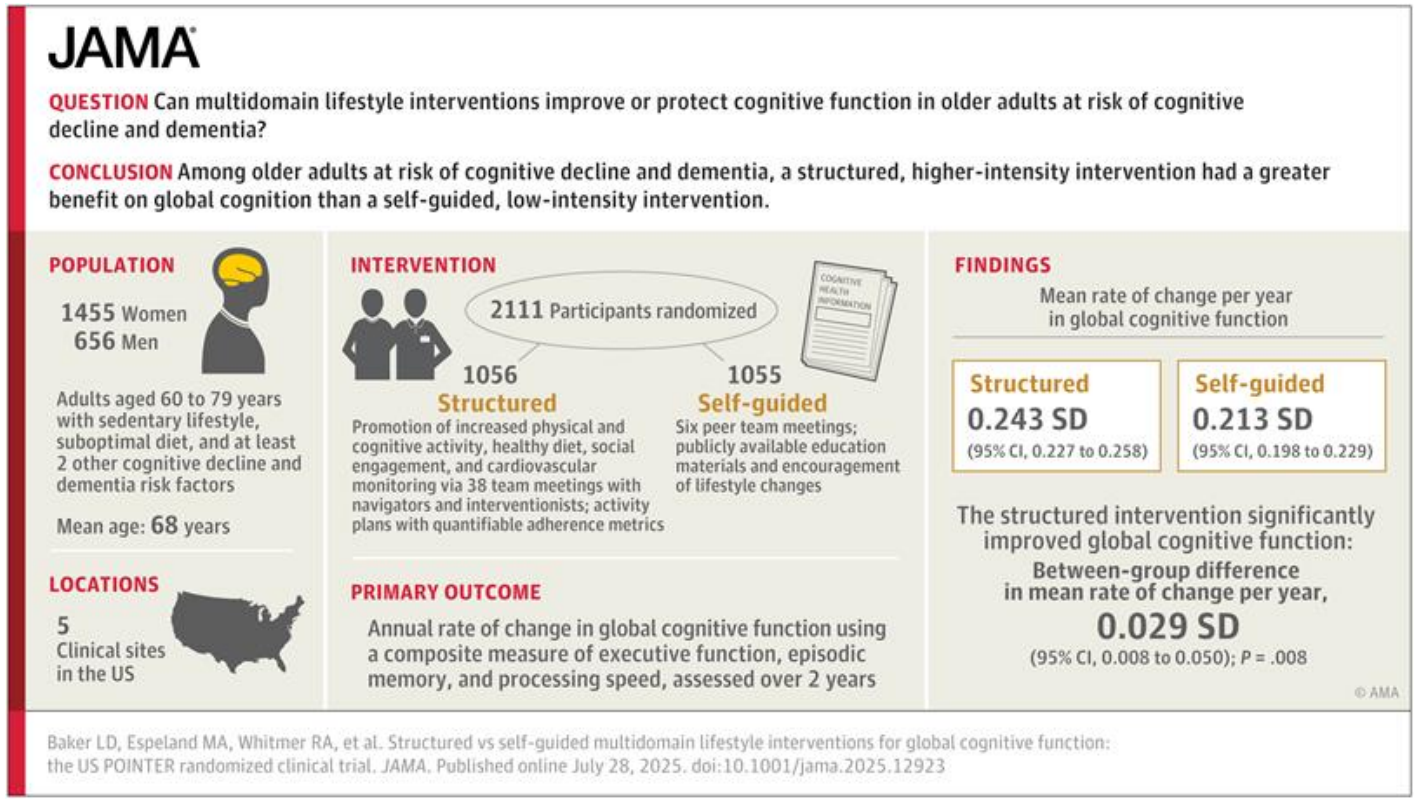
- 1260 people for 2 years
  - Nutritional guidance, exercise
  - Cognitive training/social activities
  - Improvement of metabolic/vascular RF
  - Control group: 13 pep talks



- Adherence: 12% dropout rate

- Results: All 3 cog domains improved over placebo: memory, executive function, processing speed ($p < 0.05$).
  - Those >70, or with MMSE <26 improved more

US POINTER Study



JAMA

QUESTION Can multidomain lifestyle interventions improve or protect cognitive function in older adults at risk of cognitive decline and dementia?

CONCLUSION Among older adults at risk of cognitive decline and dementia, a structured, higher-intensity intervention had a greater benefit on global cognition than a self-guided, low-intensity intervention.

POPULATION

1455 Women
656 Men

Adults aged 60 to 79 years with sedentary lifestyle, suboptimal diet, and at least 2 other cognitive decline and dementia risk factors

Mean age: 68 years

LOCATIONS

5 Clinical sites in the US

INTERVENTION

2111 Participants randomized

1056 **Structured**
Promotion of increased physical and cognitive activity, healthy diet, social engagement, and cardiovascular monitoring via 38 team meetings with navigators and interventionists; activity plans with quantifiable adherence metrics

1055 **Self-guided**
Six peer team meetings; publicly available education materials and encouragement of lifestyle changes

PRIMARY OUTCOME

Annual rate of change in global cognitive function using a composite measure of executive function, episodic memory, and processing speed, assessed over 2 years

FINDINGS

Mean rate of change per year in global cognitive function

Structured	Self-guided
0.243 SD (95% CI, 0.227 to 0.258)	0.213 SD (95% CI, 0.198 to 0.229)

The structured intervention significantly improved global cognitive function:
Between-group difference in mean rate of change per year,
0.029 SD
(95% CI, 0.008 to 0.050); $P = .008$

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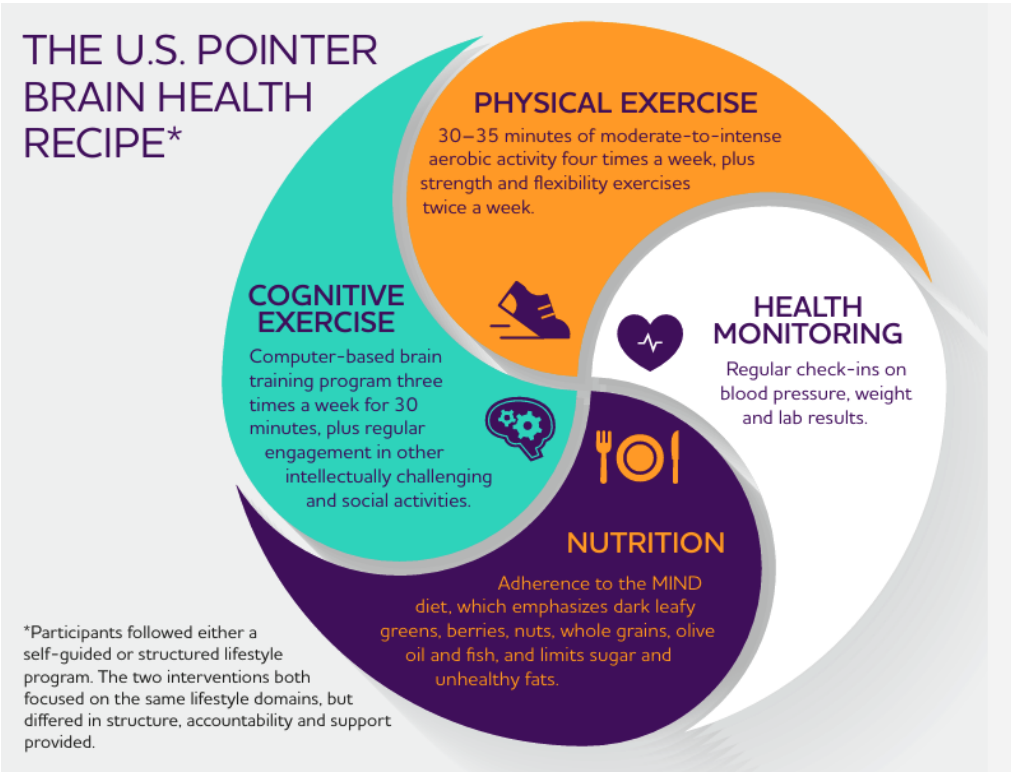
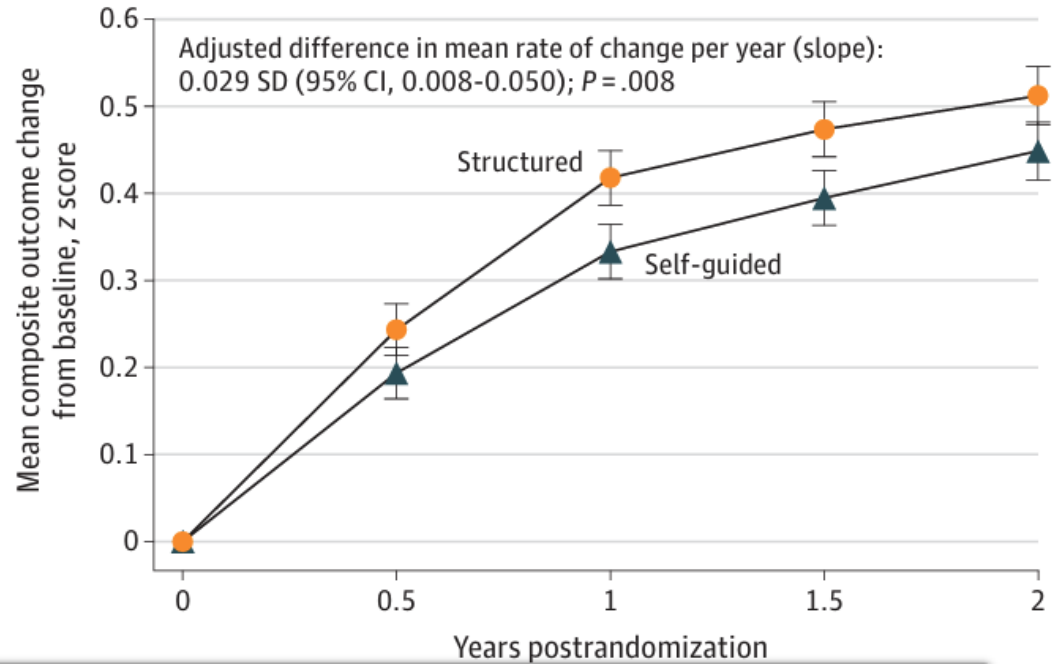
Baker LD, Espeland MA, Whitmer RA, et al. Structured vs self-guided multidomain lifestyle interventions for global cognitive function: the US POINTER randomized clinical trial. *JAMA*. Published online July 28, 2025. doi:10.1001/jama.2025.12923



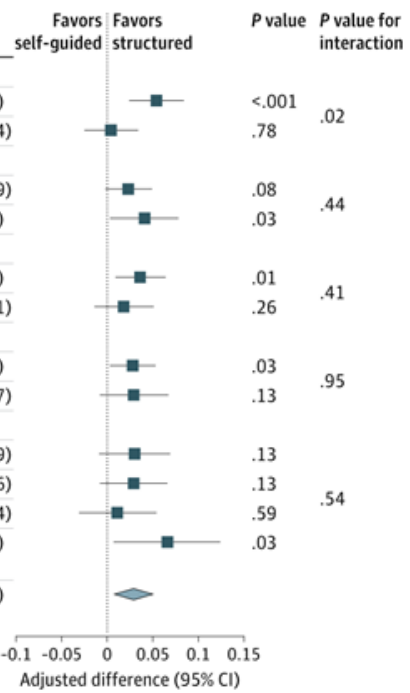
Baker et al, JAMA. 2025

US Pointer – Results

Figure 3. Change From Baseline in Global Cognitive Function Composite Score (Primary Outcome) by Structured vs Self-Guided Lifestyle Interventions



Subgroup	Structured No. of participants	Structured Mean change per y in SD (95% CI)	Self-guided No. of participants	Self-guided Mean change per y in SD (95% CI)	Adjusted difference (95% CI)	P value	P value for interaction
Baseline cognition							
Less than median	540	0.255 (0.233-0.276)	516	0.202 (0.180-0.224)	0.054 (0.024 to 0.084)	<.001	.02
Median or higher	516	0.231 (0.209-0.253)	539	0.224 (0.203-0.245)	0.004 (-0.025 to 0.034)	.78	
Sex							
Female	721	0.238 (0.219-0.256)	734	0.214 (0.196-0.232)	0.023 (-0.002 to 0.049)	.08	.44
Male	335	0.253 (0.226-0.280)	321	0.212 (0.185-0.239)	0.041 (0.003 to 0.078)	.03	
Age, y							
<70	600	0.275 (0.254-0.295)	608	0.237 (0.217-0.257)	0.036 (0.009 to 0.064)	.01	.41
≥70	456	0.202 (0.179-0.225)	447	0.182 (0.158-0.205)	0.018 (-0.014 to 0.051)	.26	
APOE ε4 carrier							
No	731	0.257 (0.238-0.275)	713	0.229 (0.210-0.247)	0.028 (0.003 to 0.053)	.03	.95
Yes	322	0.212 (0.185-0.240)	338	0.182 (0.155-0.209)	0.029 (-0.008 to 0.067)	.13	
Framingham risk							
Low	289	0.269 (0.240-0.298)	331	0.235 (0.209-0.262)	0.030 (-0.009 to 0.069)	.13	.54
Medium	344	0.243 (0.216-0.270)	334	0.214 (0.187-0.241)	0.029 (-0.008 to 0.066)	.13	
High	261	0.219 (0.189-0.250)	268	0.208 (0.179-0.238)	0.011 (-0.031 to 0.054)	.59	
Prevalent cardiovascular disease	162	0.233 (0.195-0.272)	119	0.161 (0.116-0.206)	0.066 (0.007 to 0.124)	.03	
Overall	1056	0.243 (0.227-0.258)	1055	0.213 (0.198-0.229)	0.029 (0.008 to 0.050)		



Baker et al, JAMA. 2025

Healthy Action to Benefit Independence and Thinking
HABIT (Mayo Clinic)

- 10 day brain camp for individuals with MCI, and study partner
  - amnestic MCI (additional cognitive domains okay)
  - 272 dyads
  - Age: M=75, SD = 8
  - Male 58.8%
- 5 components (suppression design)
  - physical activity (yoga)
  - brain fitness
  - memory compensation training
  - support group
  - wellness education
- 6 month booster session
- Aim: delay or prevent progression to dementia

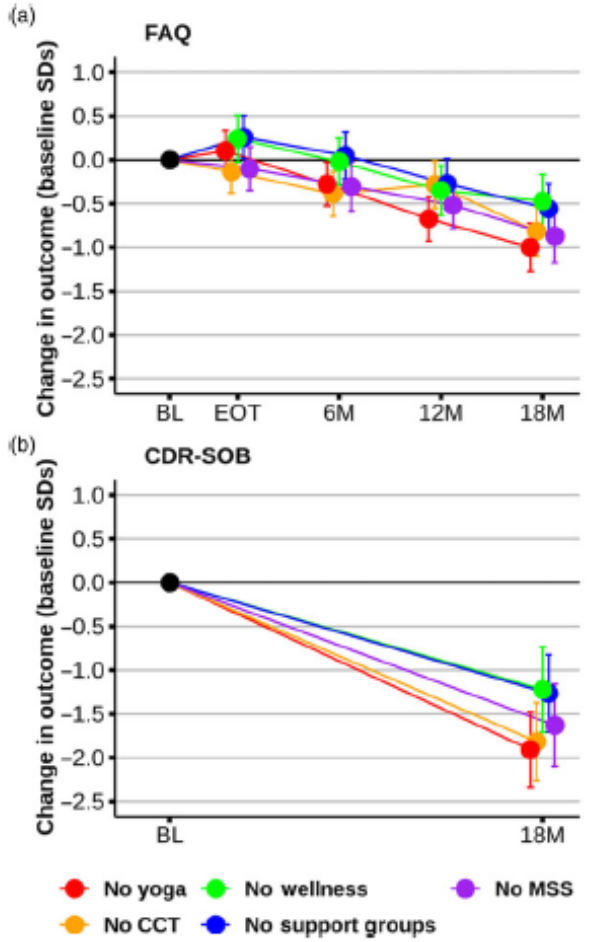


Figure 1. Effect sizes by study arm.

Shandera-Ochsner et al., 2021, J Int Neuropsychol Soc

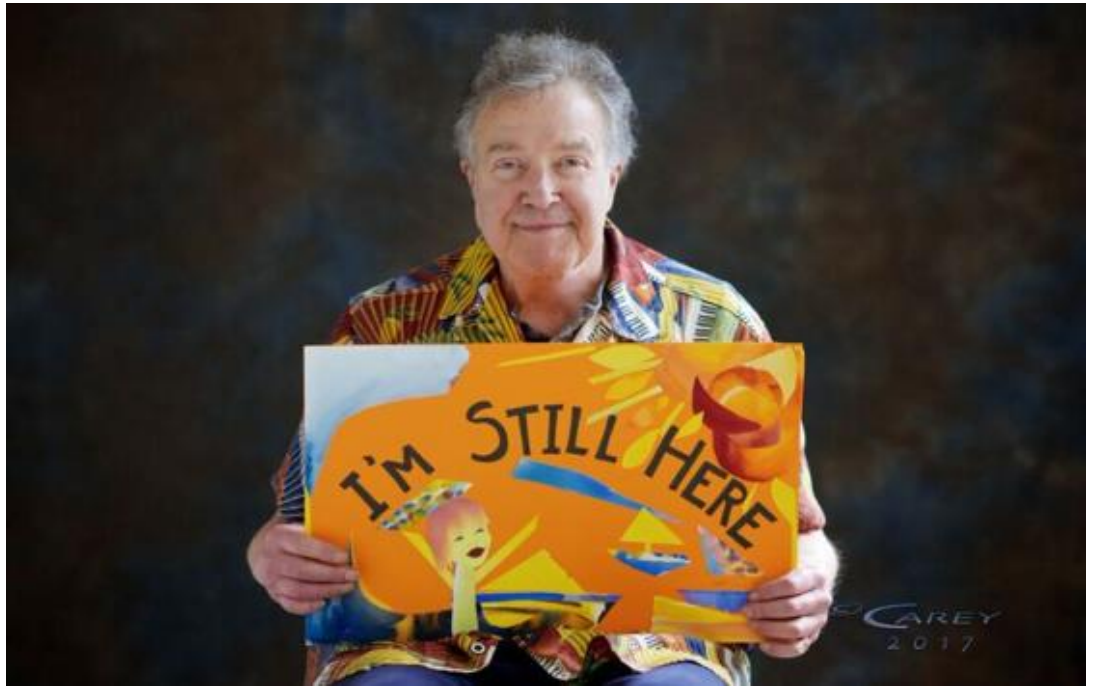
ADAPT Program

- Applied Daily Activities to Promote Thinking
- Six sessions, taper design
- Multimodal treatment
  - Exercise
  - Meditation
  - Support groups
  - Cognitive rehabilitation
  - Education

Time	Activity
8:45 – 9 AM	Arrival, Check-In
9 – 9:15 AM	Welcome Mindfulness Meditation
9:15 – 10:15 AM	Staying in Motion
10:15 – 11:15 AM	Calendar Training
11:15 - 12:15 AM	Support Groups
12:15 – 12:30 PM	Mindfulness Meditation Closing

Programs and Services

- Support groups/educational events
- Dementia Friendly Communities
- Momentia
  - Zoo/Garden walks
  - Alzheimer's cafes
  - Arts events
- Dementia Friends
- Intergenerational programs



Socialization and Community Engagement

UW Memory and Brain Wellness Center
Memory Hub

- Outreach center in partnership with Frye Art Museum
  - Dementia-Friendly Community, Collaboration, and Statewide Impact

https://https://thememoryhub.org/

Resources

- WHO Dementia Risk Reduction Guidelines
  - https://www.who.int/publications/i/item/9789241550543

- Alzheimer's Association
  - Taking Action workbook: http://www.alz.org/mnnd/documents/15_ALZ_Taking_Action_Workbook.pdf
  - Living Well workbook: http://www.alz.org/mnnd/documents/15_ALZ_Living_Well_Workbook_Web.pdf

- Mindfulness Northwest
  - http://www.mindfulnessnorthwest.com/

- Momentia Seattle
  - www.momentiaseattle.org

- UW Memory Hub
  - https://https://thememoryhub.org/

Contact Information

Memory and Brain Wellness Center

https://depts.washington.edu/mbwc/
Harborview Medical Center
325 9th Ave., 3rd Floor West Clinic
Seattle, WA 98104
Phone 206-744-3045
Fax 206-744-5030
krhoads@uw.edu

UW Medicine
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Thank you for your attention!

Questions?

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