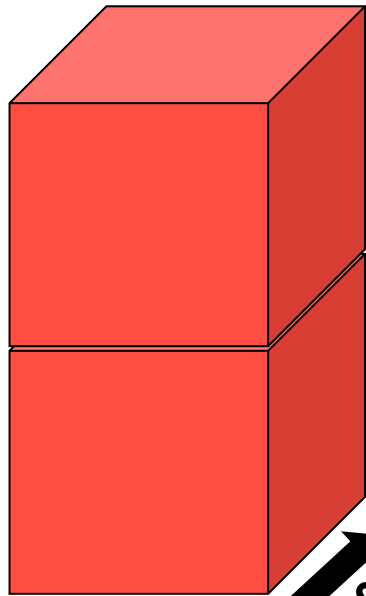


COGITO's Cognitive Cubes

101 Younger & 103 older adults



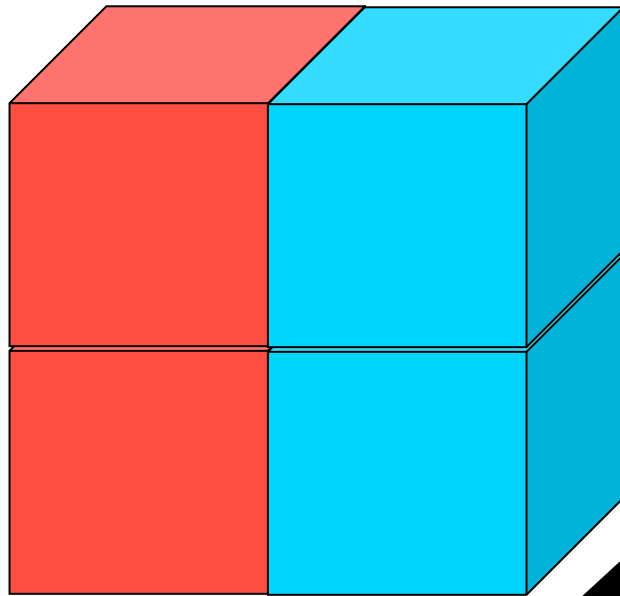
12 cognitive tasks

100 daily sessions

	Verbal	Numerical	Figural/ Spatial
Perceptual Speed	Comparison tasks		
	Choice reaction tasks		
Episodic Memory	Word memory	Number memory	Object position memory
	Alpha Span	Memory Updating	N-Back

COGITO's Self-report Cubes

101 Younger & 103 older adults



Self-report
items/scales

100
daily
sessions

Before cognitive tasks:

Mood/Affect: PANAS & Happiness
Sleep: quality & quantity
Health: constraints of daily activities
Events: 8 event categories (DISE) + others
Stress: perceived stress & control
Coping: rumination, self-regulation, distraction, reappraisal, suppression, avoidance, planning
Task-related motivation

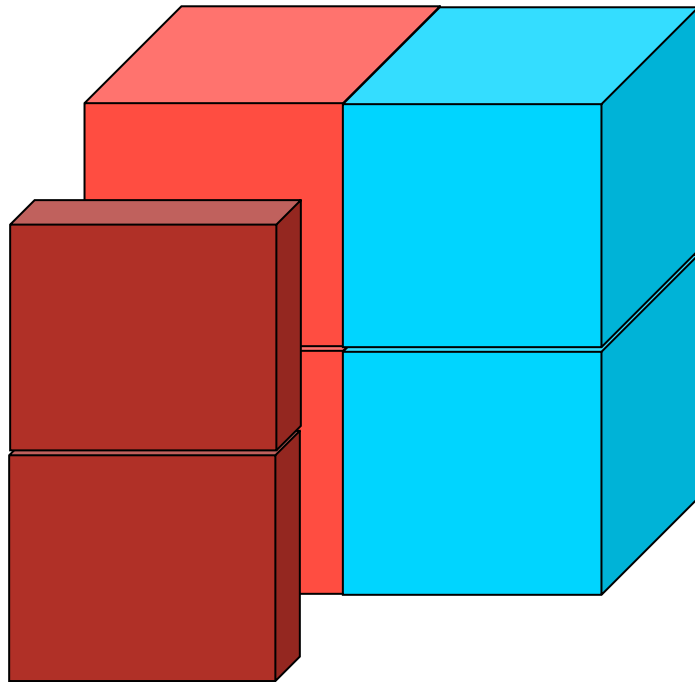
After cognitive tasks:

Evaluation of performance
Distraction
Enjoyment & effort

Brose, Schmiedek, Lövdén, Molenaar & Lindenberger (2010)
Brose, Schmiedek, Lövdén, & Lindenberger (2011, 2012)

COGITO's Cognitive Baseline Measures

101 Younger & 103 older adults



Cognitive
pretest

Intensive assessment of 12 daily tasks:

→ Varying presentation times for working/episodic memory

Transfer tasks:

Reasoning (13)

Episodic memory (10)

Working memory updating (3)

Working memory complex span (3)

Processing speed (13)

Vocabulary (1)

COGITO's Self-report Baseline Measures



Personality:

- Big Five
- Self efficacy
- Control beliefs
- Self regulation
- Emotion regulation
- Affect intensity

Well-being/Health:

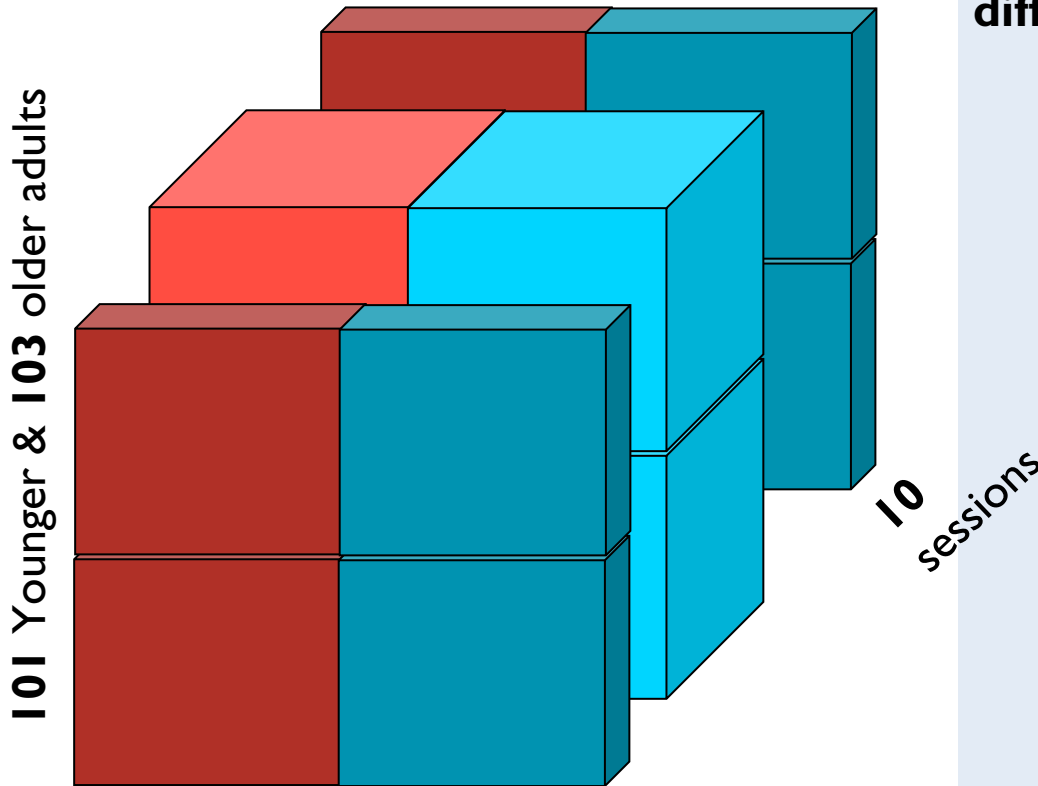
- Life satisfaction
- Affective well-being
- Psychological well-being
- Depressive symptoms
- Physical symptoms
- Major illnesses
- Alcohol consumption
- Information on chronotype, seasonality

Stress:

- Major life events
- Perceived stress
- Chronic stress
- Coping



COGITO's Posttest



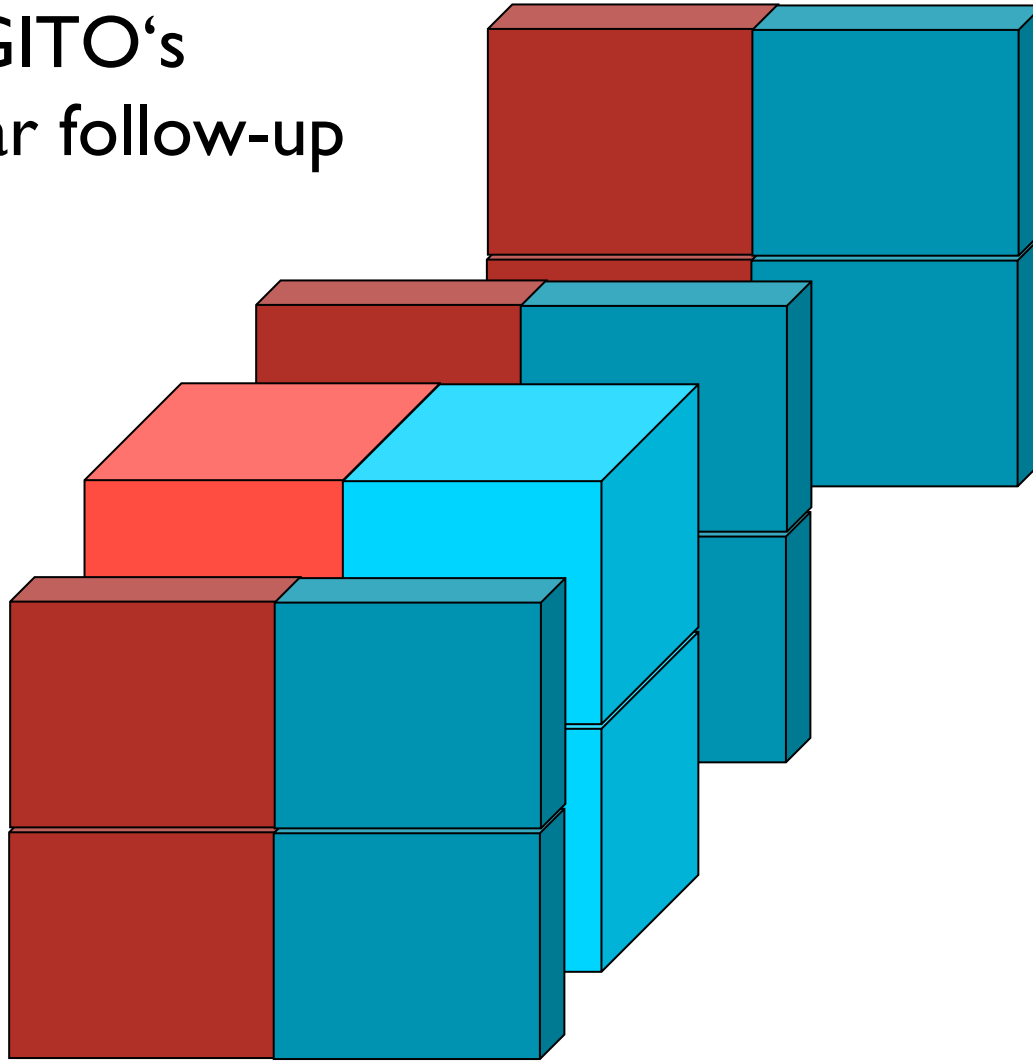
Posttest:
**Repetition of cognitive pretest +
different self-report scales:**

- Physical activity
- Social and cultural engagement
- Personal interests
- Social support
- Goal pursuit & adjustment
- Screening of psychopathological symptoms
- Typical intellectual engagement
- Beliefs about memory

Study evaluation: enjoyment,
motivation, strategy use

COGITO's 2-year follow-up

101 Younger & 103 older adults



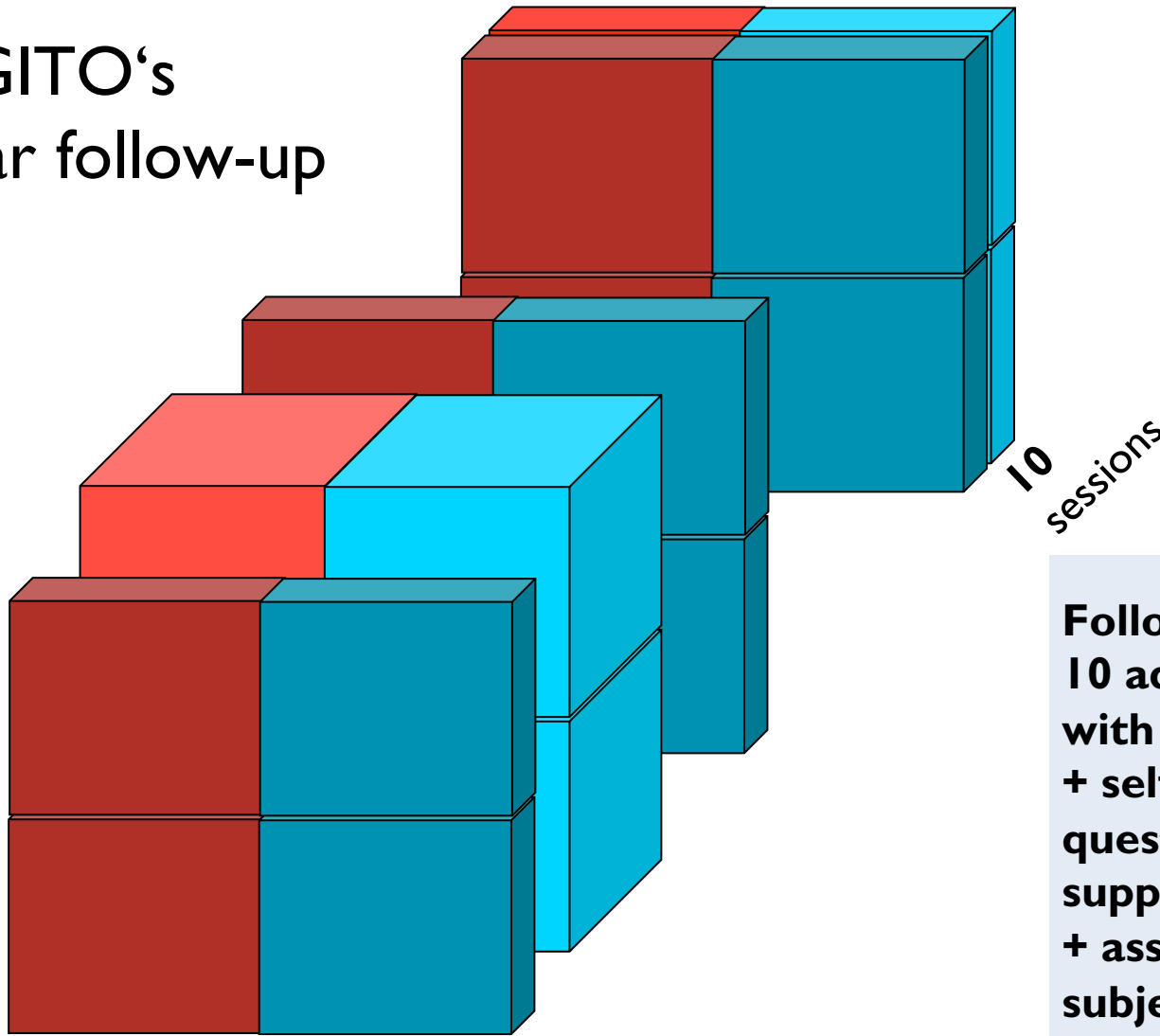
10
sessions

**Follow-up:
Repetition of
cognitive pretest +
partly different self-
report scales:**

- Self-esteem
- Social support & integration
- Health behaviors

COGITO's 2-year follow-up

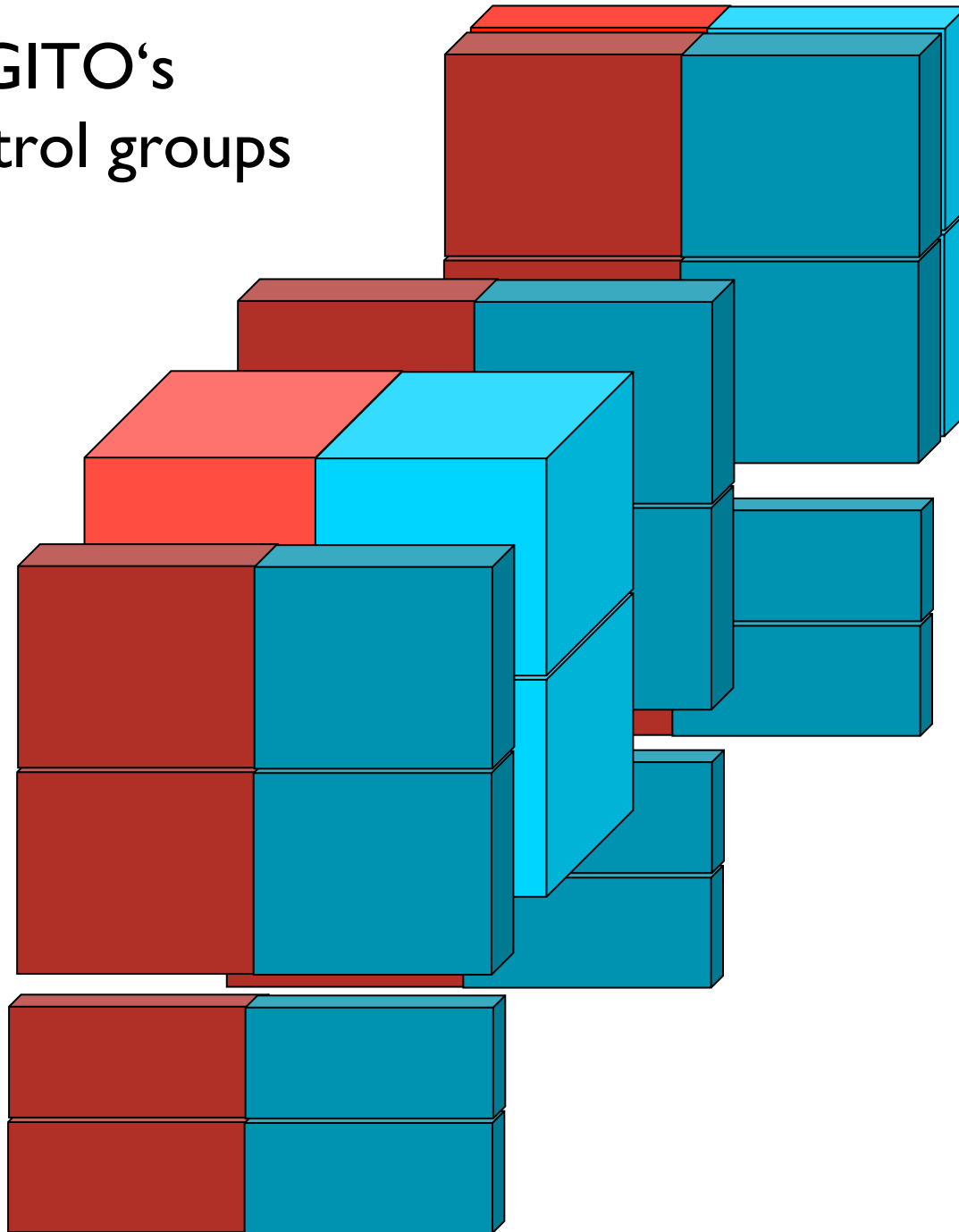
101 Younger & 103 older adults



Follow-up:
10 additional sessions
with daily protocol
+ self-report
questions on social
support
+ assessment of
subjective and
objective physical
fitness

COGITO's Control groups

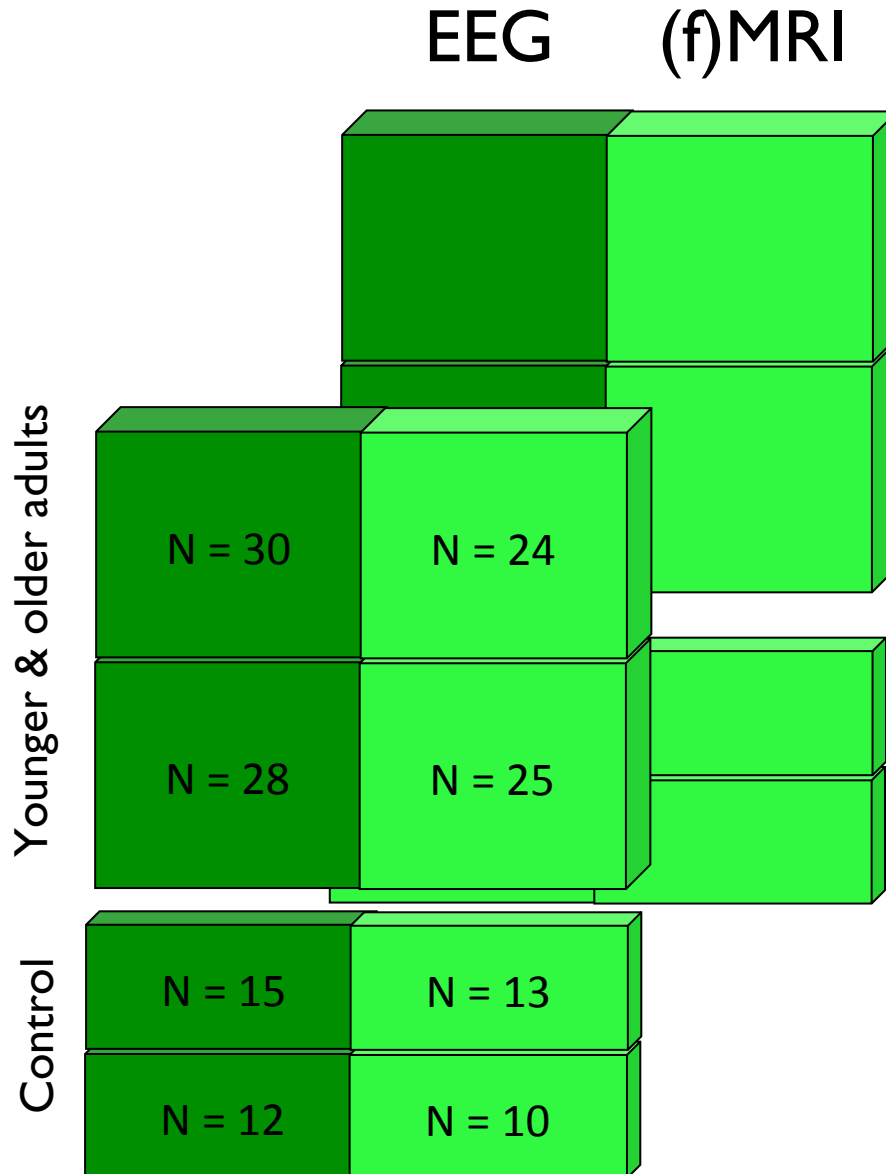
44 Younger &
40 older adults



Control groups:

**Same pretest/
posttest/follow-up
with comparable time
delays between
occasions**

COGITO's Neuroscience



EEG:

- Resting state
- Two-choice tasks

MRI:

hand-traced regions

DTI

fMRI:

- Memory updating
- Paired associated
- Two-choice decision