

**Supplementary material of “Association between meditative capacities and cognitive functions in healthy older adults naïve to meditation practice” (Journal: *Mindfulness*)**

Florence Requier <sup>1,2</sup>, Anne Sophia Hendy <sup>3</sup>, Marco Schlosser <sup>3,4</sup>, Harriet Demnitz-King <sup>3</sup>, Tim Whitfield <sup>3</sup>, Gael Chetelat <sup>5</sup>, Olga Klimecki <sup>6</sup>, Antoine Lutz <sup>7</sup>, Natalie L. Marchant <sup>3</sup>, Fabienne Collette <sup>1,2</sup>

1. GIGA-CRC In Vivo Imaging, Université de Liège, Bâtiment B30, Allée du Six Août, 8, Sart Tilman, 4000 Liège, Belgium
2. Psychology and Neuroscience of Cognition, University of Liège, 4000 Liège, Belgium
3. Division of Psychiatry, University College London, London, UK
4. Department of Psychology, Faculty of Psychology and Educational Sciences, University of Geneva, Geneva, Switzerland
5. Normandie University, UNICAEN, INSERM, U1237, PhIND "Physiopathology and Imaging of Neurological Disorders", Institut Blood and Brain at Caen-Normandie, Cycleron, 14000 Caen, France
6. Swiss Center for Affective Sciences, Department of Medicine, University of Geneva, Geneva, Switzerland
7. Lyon Neuroscience Research Center, INSERM U1028, CNRS UMR5292, Lyon University, Lyon, France

**Corresponding author:** Fabienne Collette; Email: <[f.collette@uliege.be](mailto:f.collette@uliege.be)>; Telephone number: +32 4 3662369; Postal address: GIGA-CRC IVI, Allée du Six Août, 8 (B30), 4000 Sart-Tilman, Belgium

**Table S1.** Descriptive data: cognitive tests

<b>Cognitive tests</b>	<b>Raw scores: Mean <math>\pm</math> SD (range)</b>
<b>Mattis Dementia Rating Scale</b>	141.0 $\pm$ 2.7 (130-144)
<b>CVLT-II (sum of 5 trials)</b>	57.5 $\pm$ 8.1 (30-73)
<b>CVLT-II (short term)</b>	12.0 $\pm$ 2.7 (5-16)
<b>CVLT-II (long term)</b>	12.5 $\pm$ 2.7 (2-16)
<b>Logical Memory (short term)</b>	14.6 $\pm$ 3.0 (2-22)
<b>Logical Memory (long term)</b>	13.4 $\pm$ 3.5 (5-22)
<b>Digit Span forward</b>	8.9 $\pm$ 2.4 (5-15)
<b>Digit Span backward</b>	8.2 $\pm$ 1.95 (5-16)
<b>Coding</b>	61.1 $\pm$ 12.5 (36-99)
<b>Stroop naming<sup>1</sup></b>	62.2 $\pm$ 9.6 (40-109)
<b>Stroop interference-naming<sup>1</sup></b>	50.5 $\pm$ 21.1 (13-146)
<b>TMT A<sup>1</sup></b>	35.9 $\pm$ 11.3 (16-70)
<b>TMT B<sup>1</sup></b>	83.8 $\pm$ 32.8 (35-239)
<b>Phonemic fluency (P)</b>	22.8 $\pm$ 6.3 (5-41)
<b>Categorical fluency (Animals)</b>	32.1 $\pm$ 7.6 (16-50)

*Note.* SD: Standard Deviation, CVLT-II: California Verbal Learning Test 2<sup>nd</sup> version, TMT: Trail Making Test, <sup>1</sup> Response time, *n*=134.

**Table S2.** Descriptive data: meditation questionnaires

<b>Meditation questionnaire</b>	<b>Mean <math>\pm</math> SD (range)</b>
<b>Multidimensional Assessment of Interoceptive Awareness</b>	
Noticing	3.4 $\pm$ 1.1 (0-5)
Attention Regulation	2.8 $\pm$ 0.9 (0-5)
Emotional Awareness	3.5 $\pm$ 1.0 (0-5)
Self-Regulation	3.1 $\pm$ 1.0 (0-5)
Body Listening	2.5 $\pm$ 1.2 (0-5)
<b>15-item Five Facet Mindfulness Questionnaire</b>	
Observing	9.5 $\pm$ 2.9 (3-15)
Acting with Awareness	11.7 $\pm$ 2.2 (6-15)
Non-Judging	11.6 $\pm$ 2.3 (4-15)
Non-Reactivity	9.7 $\pm$ 2.3 (4-15)
<b>Interpersonal Reactivity Index</b>	
Perspective Taking	17.4 $\pm$ 3.4 (9-28)
Empathic Concern	19.9 $\pm$ 4.2 (8-28)
Personal Distress	10.3 $\pm$ 5.2 (0-26)
<b>Compassionate Love Scale</b>	90.6 $\pm$ 21.2 (41-147)
<b>Prosocialness</b>	60.4 $\pm$ 8.3 (36-80)
<b>Drexel Defusion Scale</b>	34.4 $\pm$ 5.6 (19-48)

Note. SD: Standard Deviation,  $n=134$ .

**Table S3.** Descriptive data : affective / personality questionnaires

<b>Anxiety and Depression Questionnaires</b>	<b>Mean <math>\pm</math> SD (range)</b>
<b>STAI-B</b>	34.6 $\pm$ 7.0 (20-54)
<b>GDS</b>	1.3 $\pm$ 1.7 (0-11)
<b>Neuroticism</b>	2.3 $\pm$ 0.7 (1-3)

*Note.* SD: Standard Deviation, STAI: State Trait Anxiety Inventory, GDS: Geriatric Depression Scale,  $n=134$ .

### **Correlations analyses between affective variables**

We noted a correlation between depression and anxiety ( $r=.41$ ,  $p<.001$ ), between neuroticism and anxiety ( $r=.71$ ,  $p<.001$ ), between neuroticism and depression ( $r=.39$ ,  $p<.001$ ), and between age and education ( $r=-.18$ ,  $p<.05$ ).

**Figure S4.** Correlation plot between deconstructive capacity and Preclinical Alzheimer's Cognitive Composite (PACC5).

