

Supplement

1. Sample Information

Introduction

Younger and older adults were screened for eligibility (see main text) and completed a demographic and health questionnaire before they participated in the experiment. Older adults also answered questions about their subjective attention and memory abilities. All results of this assessment are presented below. Note that some of the demographic information and test results are also presented in the main text (Table 1).

Younger Adults (N=12)*

Demographics

Age	M= 24.18, SD= 2.68, Range 20-29
Gender	1M/ 11F
Handedness	12R/ 0L
Highest education	7 Bachelor/ 2 Master/2 College
Years of formal education	M=17.00, SD=1.41, Range 14-18
Occupation	8 university/ 2 apprenticeship

Health

Contacts/Glasses	7 yes/ 4 no
Prescription medication	3 yes/ 8 no
Non-prescription medication	12 no/ 0 yes
Neurological disorder or damage	12 no/ 0 yes
Psychological disorder	12 no/ 0 yes
Chronic somatic disease(s)	12 no/ 0 yes
Physical activity	0 no/ 11 yes
Mental exercise	1 no/ 11 yes
Smoking	11 no/ 0 yes
Weekly alcohol consumption	4 none/ 2 one to two/ 5 > two
Weekly coffee consumption	2 none / 2 one to five / 7 > five
Hours of sleep per night	M= 7.14, SD= 0.71, Range 6-8

Vision and neuropsychological tests

Vision	12 pass/ 0 no pass
Colorblindness	12 pass/ 0 no pass
NAART	M= 16, SD= 4.69, Range 12-41
VIQ	M= 116.88, SD= 6.16, Range 110-128
PIQ	M= 113.82, SD= 2.91, Range 110-119
FIQ	M= 117.44, SD= 5.40, Range 111-118
DSST	M= 68, SD= 7.99, Range 55-81

CFQ -Total	M= 26.00, SD=10.76, Range 13-45
CFQ -Forgetfulness	M= 11, SD= 3.72, Range 6-18
CFQ -Distractability	M= 8.82, SD=4.60, Range 4-18
CFQ -False Triggering	M= 5.7, SD= 3.65, Range 1-12
CES-D (> 20 exclusion)	M= 4.73, SD= 4.80, Range 1-17

* data of one younger participant of the pre-experimental assessment were not complete

Older Adults

Demographics

Age	M=72.5, SD=5.35, 66-84
Gender	6M/ 6F
Handedness	10R/ 2L
Highest education	12 college/ 0 no college
Years of formal education	M= 16.58, SD=1.98, 12-19
Occupation/ Previous Occupation	0 manual work/2 non-manual work/ 10 professional or intellectual work
Retired	11 yes/ 1 no

Health

Contacts or glasses	11 yes/ 1 no
Chronic eye disease	0 yes/ 12 no
Learning difficulties	0 yes/ 12 no
Prescription medication	8 yes/ 4 no
Non-prescription medication	6 yes/ 6 no
Neurological disorder or damage	0 yes/ 12 no
Psychological disorder	0 yes/ 12 no
Chronic somatic disease(s)	0 yes/ 12 no
Physical activity	10 yes/ 2 no
Mental exercise	11 yes/ 1 no
Smoking	1 yes/ 11 no
Weekly alcohol consumption	7 none /2 one to two /3 > two
Weekly coffee consumption	1 none / 2 one to five / 8 > five
Hours of sleep per night	M= 7.1, SD=1.30, Range 6-8
Use of New Technologies	10 yes / 1 no

Vision and neuropsychological tests

Vision	12 pass/ 0 no pass
Colorblindness	12 pass/ 0 no pass
MMSE (<20 exclusion)	M= 28.92, SD= 1.31, Range 26-30
NAART (total errors out of 59)	M=10, SD= 7.51, Range 2-27
VIQ	M= 119.8, SD= 6.68, Range 104-127
PIQ	M= 115.2, SD= 3.15, Range 108-119

FIQ	M= 120, SD= 5.86, Range 106-126
DSST	M= 49.25, SD= 8.34, Range 39-63
CRI -Total	M= 136.33, SD= 18.76, Range 110-171
CRI -Ed	M= 126.50, SD= 11.14, Range 109-146
CRI -WorkingActivity	M= 130.17, SD=25.91, Range 89-172
CRI -LeisureTime	M= 125.50, SD= 25.93, Range 81-171
CFQ -Total	M= 17.75, SD= 14.36, Range 0-51
CFQ -Forgetfulness	M= 12.92, SD= 9.95, Range 0-32
CFQ -Distractability	M= 6.83, SD= 4.86, Range 0-14
CFQ -False Triggering	M= 5.67, SD= 4.23, Range 0-13
CES-D (> 20 exclusion)	M= 5.17, SD= 5.59, Range 0-14

Subjective cognitive abilities/decline (scale 0-10, 0=very poor/none, 10=very good/much)

Ability to pay attention	M= 8.83, SD= 1.03, Range 7-10
Ability to concentrate	M= 9.20, SD= 0.92, Range 8-10
Ability to remember	M= 8.00, SD=0.93, Range 7-10
Experience of concentration decrease	M= 1.42, SD= 1.44, Range 0-5
Experience of memory decline	M= 2.08, SD= 1.17, Range 1-5
Experience of decline in paying attention	M= 1.25, SD= 0.97, Range 0-3