Supplementary Material

Effectiveness of Simultaneous Combined Intervention for Enhancing Cognitive Function in Patients with Moderate Alzheimer's Disease

Supplementary Table 1. Performances in the different tasks for groups CG, AT, and ACT before training (Baseline) and after 4 Weeks (W4)

Patients with AD (n = 79)	CG (n = 26)			AT (n = 27)			ACT (n = 25)		
	Baseline	W4		Baseline	W4		Baseline	W4	
	M (SD)		*z*	*M (SD)*		*z*	*M (SD)*		*z*
Stroop interference score	14.04 (0.45)	12.5 (1027)	3.94	14.22 (0.32)	8.44 (0.93)	3.94*[a]	14.16 (0.33)	7.68 (1.21)	4.01*[a]
Hanoi execution times	91.5 (1.73)	92.11 (7.9)	3.84	90.67 (1.75)	79.77 (7.60)	4.27*[a]	85.60 (1.82)	70.92 (6.67)	4.20*[a]
Hanoi number of moves	13.19 (0.37)	12.11 (3.16)	3.95	13.89 (0.36)	12.18 (3.12)	3.67	13.16 (0.38)	11.20 (3.50)	4.15
Digit Span Forward	6.03 (0.17)	3.15 (0.19)	4.41	5.89 (0.18)	3.41 (0.12)	4.37*[a]	6.00 (0.19)	3.56 (0.11)	4.28*[a]
Digit Span Backward	4.03 (0.16)	2.75 (0.16)	3.95	4.07 (0.16)	3.11 (0.11)	3.98*[a]	4.08 (0.16)	3.20 (0.14)	3.98*[a]

Supplementary Table 2. Performances in the different tasks for groups CG, AT, and ACT after 4 Weeks (W4) and at the end of training period (W8)

Patients AD (n = 75)	CG (n = 22)			AT (n = 27)			ACT (n = 25)		
	W4	W8		W4	W8		W4	W8	
	M (SD)		*z*	*M (SD)*		*z*	*M (SD)*		*z*
Stroop interference score	12.5 (10.27)	11.21 (1.31)	1.24	8.44 (0.93)	7.03 (0.70)	1.78^{b}	7.68 (1.21)	6.24 (0.52)	1.03^{b}
Hanoi execution times	92.11 (7.9)	93.91 (7.97)	4.37	79.77 (7.60)	70.03 (5.83)	4.54^{*b}	70.92 (6.67)	60.48 (5.50)	4.37^{*b}
Hanoi number of moves	12.11 (3.16)	12.78 (2.71)	4.13	12.18 (3.12)	11.14 (3.50)	4.35	11.20 (3.50)	9.80 (3.50)	4.25
Digit Span Forward	3.15 (0.19)	3.14 (0.23)	4.65	3.41 (0.12)	3.62 (0.06)	4.28^{*b}	3.56 (0.11)	3.76 (0.13)	4.11^{*b}
Digit Span Backward	2.75 (0.16)	2.75 (0.15)	4.71	3.11 (0.11)	3.31 (0.11)	4.37^{*b}	3.20 (0.14)	3.39 (0.07)	3.31^{*b}

Supplementary Table 3. Performances in the different tasks for groups CG. AT. and ACT after 8 (W8) and after 4 weeks of detraining (W12)

Patients with AD (n = 73)	CG (n = 20)			AT (n = 27)			ACT (n = 25)		
	W8	W12		W8	W12		W8	W12	
	M (SD)		*z*	*M (SD)*		*z*	*M (SD)*		*z*
Stroop interference score	11.21 (1.31)	11.14 (1.40)	0.83	7.03 (0.70)	7.03 (0.89)	0.64	6.24 (0.52)	6.32 (0.62)	0.10
Hanoi execution times	93.91 (7.97)	93.42 (6.00)	0.84	70.03 (5.83)	69.00 (6.72)	0.07*	60.48 (5.50)	60.28 (4.38)	0.74*
Hanoi number of moves	12.78 (2.71)	13.00 (2.54)	0.89	11.14 (3.50)	11.14 (3.50)	0.41	9.80 (3.5)	9.52 (3.42)	0.36
Digit Span Forward	3.14 (0.23)	3.22 (0.10)	0.40	3.62 (0.06)	3.62 (0.09)	0.57*	3.76 (0.13)	3.77 (0.12)	0.24*
Digit Span Backward	2.75 (0.15)	2.84 (0.13)	0.92	3.31 (0.11)	3.32 (0.09)	0.32*	3.39 (0.07)	3.38 (0.05)	0.58*

*significant difference between AT and ACT, a: significant difference between baseline and W4 (p<0.001) and b: significant difference between W4 and W8 (p<0.001).