

Electronic supplementary material

ESM Table 1 Group effects post-intervention (i.e. at 12 weeks) and 6 months after the intervention

Outcome variables	Control group			Intervention group			Effect (95% CI)	
	BA	PI	FU	BA	PI	FU	Post-intervention	Follow-up
Speed (m/s)	1.26 (0.18)	1.24 (0.19)	1.24 (0.15)	1.21 (0.17)	1.36 (0.19)	1.31(0.18)	0.15 (0.09, 0.21)†	0.12 (0.06, 0.17)†
CVGCT (%)	2.75 (0.96)	2.70 (1.12)	1.09 (0.21)	2.60 (0.72)	2.68 (0.99)	2.52(0.949)	−0.00 (−0.41, 0.4)	−0.24 (−0.66, 0.19)
Crossing beam (s)	8.35 (3.89)	9.32 (5.19)	9.32 (4.05)	9.78 (5.58)	7.10 (3.55)	7.08 (3.61)	−3.39 (−4.7, −2.09)†	−3.74 (−5.07, −2.41)†
POMA balance	12.72 (1.58)	12.22 (1.68)	12.86 (1.48)	12.20 (1.62)	13.6 (1.33)	14 (0.98)	1.46 (0.84, 2.07)†	1.38 (0.79, 1.97)†
POMA walk	11.00 (1.29)	10.91 (1.3)	10.76 (1.3)	10.80 (1.66)	11.27 (1.14)	11.23 (1.17)	0.60 (0.32, 0.87)†	0.72 (0.35, 1.1)†
POMA total score	23.69 (2.55)	23.13 (2.54)	23.62 (2.58)	23.03 (3.02)	24.83 (1.95)	25.07 (1.72)	2.04 (0, 1.34)†	1.97 (1.14, 2.8)†
Biodex level 6 (SI)	6.00 (2.79)	5.99 (2.76)	6.42 (2.83)	5.97 (2.59)	3.74 (1.12)	4.74 (1.51)	−1.91 (−2.73, −1.08)†	−1.26 (−2.12, −0.4)*
Biodex level 8 (SI)	4.58 (2.02)	4.72 (1.94)	4.77 (1.93)	4.29 (2.18)	2.94 (1.06)	3.31 (1.02)	−0.62 (−1.22, −0.03)*	−0.93 (−1.61, −0.26)*
FES I	20.9 (6.1)	21.2 (6.0)	22.3 (6.9)	21.7 (5.3)	18.7 (2.5)	19.5 (19.5)	−3.21 (−4.62, −1.8)†	−3.70 (−5.45, −1.95)†
Flexors hip (N)	241.9 (66.7)	245.6 (62.8)	226.4 (47.6)	212.9 (53.5)	279.4 (62.8)	245.9 (47.6)	44.09 (24.04, 64.14)†	32.75 (17.25, 48.25)†
Extensors hip (N)	132.7 (58.9)	143.6 (71.1)	115.5 (50.0)	117.2 (49.2)	164.5 (71.1)	149.2 (50.0)	26.81 (7.25, 46.38)*	36.13 (4.38, 0)
Flexors knee (N)	118.9 (34.8)	125.8 (35.6)	108.9 (28.8)	114.8 (38.0)	125.8 (35.6)	123.2 (28.8)	3.51 (−8.24, 15.26)	14.40 (2.96, 25.84)*
Extensors knee (N)	228.8 (62.5)	238.5 (61.7)	226.5 (64.5)	212.1 (52.0)	243.0 (61.7)	231.3 (64.5)	18.09 (4.31, 31.86)*	18.25 (2.77, 33.74)*
Plantar flexors (N)	246.1 (51.6)	243.4 (49.0)	241.6 (61.7)	233.0 (56.1)	268.1 (49.0)	250.1 (61.7)	30.19 (12.76, 47.61)†	13.62 (−8.19, 35.43)
Dorsal flexors (N)	202.5 (61.2)	212.3 (49.9)	211.4 (61.3)	202.5 (50.4)	238.5 (49.9)	228.1 (61.3)	26.29 (7.94, 44.65)*	17.43 (−4.55, 39.41)
Hip flexion (°)	102 (8.3)	101 (6.8)	100 (7.5)	104 (9.7)	108 (6.8)	107 (7.5)	4.93 (2.19, 7.67)†	4.67 (1.66, 7.68)*
Knee flexion (°)	124 (7.9)	122 (9.3)	122 (8.4)	125 (6.6)	126 (9.3)	125 (8.4)	1.72 (−0.83, 4.27)	2.29 (−0.45, 5.04)
Plantar flexion (°)	42 (6.8)	43 (8.82)	41 (7.5)	44 (7.1)	47 (8.8)	45 (7.5)	3.45 (0.11, 6.79)*	3.44 (0.34, 6.53)*
Dorsal flexion (°)	6 (3.6)	5 (4.1)	5 (5.2)	5 (3.9)	8 (4.1)	6 (5.1)	2.49 (0.87, 4.12)*	1.19 (−0.59, 2.97)

Values are mean and (SD), unless otherwise indicated; $n=71$ except for Biodex and strength measures ($n=69$) due to material failure and for crossing beam ($n=70$) due to inability to complete task .

* $p \leq 0.05$ for group effect; † $p \leq 0.0026$ for group effect at Bonferroni-corrected alpha level (alpha divided by number of tests per follow up)

BA, baseline; FES I, Falls Efficacy Scale International; FU, follow-up; PI, post-intervention; SI, sway index