

SUBGROUP: > 1000m					
Outcome (n: AT,CT,UPT)	INTERVENTION			Difference among groups	
	AT	CT	UPT	P value	Effect size (η_p^2)
POMA (0-28)					
T0 (5, 7, 13)	16.4 ± 3.1	15.14 ± 2.4	16.6 ± 3.5	0.608 ^a	0.044
T1 (5, 7, 13)	18.8 ± 1.5	19.0 ± 2.4	19.4 ± 3.0	0.780 ^b	0.023
T2 (4, 7, 11)	18.5 ± 3.9	19.6 ± 4.5	20.4 ± 3.3	0.686 ^b	0.041
T3 (3, 5, 8)	20.7 ± 5.8	22.8 ± 4.7	25.1 ± 2.1	0.119 ^b	0.298
EMS (0-20)					
T0 (5, 7, 13)	12.6 ± 3.1	10.6 ± 2.6	11.5 ± 3.9	0.613 ^a	0.044
T1 (5, 7, 13)	14.2 ± 3.3	16.6 ± 1.6	16.4 ± 2.5	0.102 ^b	0.196
T2 (4, 7, 11)	15.8 ± 3.2	15.6 ± 3.2	17.6 ± 2.5	0.315 ^b	0.121
T3 (3, 5, 8)	17.3 ± 4.6	17.4 ± 2.4	17.9 ± 2.0	0.859 ^b	0.018
TUG (s)					
T1 (5, 7, 13)	32.4 (17.8-37.5)	21.6 (14.5-48.9)	21.9 (14.5-36.5)	0.504 ^c	-
T2 (4, 7, 11)	23.2 (15.4-27.3)	23.8 (15.1-37.9)	22.2 (10.4-34.1)	0.580 ^c	-
FAC (0-5)					
T0 (5, 7, 13)	2.0 (2.0-3.0)	2.0 (2.0-4.0)	2.0 (2.0-4.0)	0.570 ^c	-
Δ T1 (5, 7, 13)	1.0 (1.0-2.0)	2.0 (1.0-2.0)	1.0 (-1.0-2.0)	0.304 ^c	-
Δ T2 (4, 7, 11)	1.0 (1.0-2.0)	2.0 (0.0-2.0)	1.0 (0.0-2.0)	0.829 ^c	-
Δ T3 (3, 5, 8)	2.0 (1.0-3.0)	2.0 (1.0-3.0)	2.0 (1.0-3.0)	0.943 ^c	-
Walking speed (m/s)					
T1 (5, 7, 13)	0.58 ± 0.25	0.69 ± 0.25	0.67 ± 0.17	0.661 ^a	0.037
T2 (4, 7, 11)	0.69 ± 0.14	0.67 ± 0.22	0.75 ± 0.22	0.724 ^a	0.033
NEADL (0-66)					
T0 (5, 7, 13)	52.4 ± 3.4	50.4 ± 13.5	54.1 ± 6.9	0.681 ^a	0.034
T2 (4, 7, 11)	31.9 ± 20.9	29.6 ± 17.0	34.8 ± 16.8	0.962 ^b	0.004
T3 (3, 5, 8)	41.0 ± 19.2	40.6 ± 16.6	46.1 ± 9.8	0.863 ^b	0.024

Measures related to mobility, walking and daily functioning in the adaptability treadmill (AT) group, conventional treadmill (CT) group and usual physical therapy (UPT) group at baseline (T0), directly after (T1), four weeks after (T2) and 12 months (T3) after the intervention. *P* values for group differences were obtained using ^a One-Way ANOVA, ^b ANCOVA with baseline performance as covariate and ^c Kruskal-Wallis test.

SUBGROUP: < 1000m					
Outcome (n: AT,CT,UPT)	INTERVENTION			Difference among groups	
	AT	CT	UPT	<i>P</i> value	Effect size (η_p^2)
POMA (0-28)					
T0 (14, 10, 8)	15.2 ± 2.9	15.9 ± 3.8	14.0 ± 5.3	0.589 ^a	0.036
T1 (14, 10, 8)	19.6 ± 2.3 [*]	20.1 ± 1.7 [*]	17.3 ± 4.1	0.086 ^b	0.160
T2 (13, 10, 6)	20.8 ± 1.5	21.4 ± 3.2	17.8 ± 4.2	0.116 ^b	0.158
T3 (5, 7, 6)	23.4 ± 2.3	24.1 ± 2.5 [*]	20.3 ± 3.6	0.059 ^b	0.333
EMS (0-20)					
T0 (14, 10, 8)	10.7 ± 3.9	11.4 ± 3.8	9.5 ± 3.2	0.558 ^a	0.039
T1 (14, 10, 8)	15.6 ± 1.9 [*]	16.4 ± 1.6 [*]	13.3 ± 3.4	0.033 ^b	0.216
T2 (13, 10, 6)	16.3 ± 2.5	16.8 ± 1.8	14.0 ± 4.1	0.244 ^b	0.107
T3 (5, 7, 6)	17.0 ± 1.9	18.6 ± 1.3	17.2 ± 2.1	0.207 ^b	0.202
TUG (s)					
T1 (14, 10, 8)	25.8 (13.5-60.7)	24.6 (13.6-37.7)	27.2 (13.3-79.9)	0.571 ^c	-
T2 (13, 10, 6)	19.3 (11.9-49.3)	20.3 (10.4-88.9)	27.9 (12.9-42.2)	0.839 ^c	-
FAC (0-5)					
T0 (14, 10, 8)	2.5 (2.0-4.0) [†]	2.0 (2.0-2.0)	2.0 (2.0-3.0)	0.014 ^c	-
ΔT1 (14, 10, 8)	1.0 (0.0-2.0) ^{††}	2.0 (2.0-2.0) ^{**}	1.0 (0.0-2.0)	0.010 ^c	-
ΔT2 (13, 10, 6)	1.0 (0.0-2.0) ^{††}	2.0 (2.0-3.0)	1.5 (0.0-3.0)	0.021 ^c	-
ΔT3 (5, 7, 6)	1.0 (0.0-3.0)	2.0 (2.0-3.0)	2.0 (2.0-3.0)	0.148 ^c	-
Walking speed (m/s)					
T1 (14, 10, 8)	0.67 ± 0.22	0.78 ± 0.25	0.56 ± 0.25	0.149 ^a	0.123
T2 (13, 10, 6)	0.75 ± 0.22	0.75 ± 0.28	0.67 ± 0.31	0.757 ^a	0.021
NEADL (0-66)					
T0 (13, 10, 8)	41.0 ± 9.5	36.9 ± 10.1	42.3 ± 12.6	0.518 ^a	0.046
T2 (13, 10, 6)	32.4 ± 15.8 [†]	42.1 ± 12.2 ^{**}	30.8 ± 23.1	0.006 ^b	0.336
T3 (5, 7, 6)	44.0 ± 7.1	43.0 ± 9.1	39.7 ± 13.5	0.355 ^b	0.137

Measures related to mobility, walking and daily functioning in the adaptability treadmill (AT) group, conventional treadmill (CT) group and usual physical therapy (UPT) group at baseline (T0), directly after (T1), four weeks after (T2) and 12 months (T3) after the intervention. *P* values for group differences were obtained using ^a One-Way ANOVA, ^b ANCOVA with baseline performance as covariate and ^c Kruskal-Wallis test.

Significant group effects are presented in bold ($p < 0.05$). Post-hoc tests:

** Significantly different from usual physical therapy (UPT) ($p < 0.01$)

* Trend towards different from usual physical therapy (UPT) ($p < 0.05$)

†† Significantly different from conventional treadmill training (CT) ($p < 0.01$)

† Trend towards different from conventional treadmill training (CT) ($p < 0.05$)

SUBGROUP: > 1000m					
Outcome (n: AT, CT, UPT)	INTERVENTION			Difference among groups	
	AT	CT	UPT	P value	Effect size (η_p^2)
Obstacle effect (%)					
T1 (5, 7, 13)	-20.4 ± 13.8	-17.1 ± 10.7	-27.7 ± 15.4	0.258 ^a	0.116
T2 (4, 7, 11)	-27.0 ± 7.0	-23.5 ± 10.6	-21.2 ± 10.6	0.623 ^a	0.049
Obstacle success rate (%)					
T1 (5, 7, 13)	100.0 (66.7-100.0)	83.3 (0.0-100.0)	83.3 (0.0-100.0)	0.403 ^b	-
T2 (4, 7, 11)	100.0 (66.7-100.0)	100.0 (33.3-100.0)	86.4(33.3-100.0)	0.931 ^b	-
DTE- walking speed (%)					
T1 (5, 7, 13)	-18.0 ± 26.0	-28.6 ± 21.1	-37.7 ± 10.1	0.109 ^a	0.182
T2 (4, 7, 11)	-24.3 ± 28.6	-38.0 ± 18.9	-24.6 ± 17.2	0.353 ^a	0.104
DTE- subtractions (%)					
T1 (5, 7, 13)	4.8 (-100.0-48.7)	0.0 (-30.1-26.8)	-0.2 (-29.7-48.0)	0.941 ^b	-
T2 (4, 7, 11)	-14.1(-100.0-36.4)	0 (-12.9-59.7)	9.4 (-46.0-677.9)	0.641 ^b	-

Measures related to obstacle avoidance performance and dual-task effects (DTE) in the adaptability treadmill (AT) group, conventional treadmill (CT) group and usual physical therapy (UPT) group directly after (T1) and four weeks after (T2) intervention. *P* values for group differences were obtained using ^aOne-Way ANOVA and ^bKruskal-Wallis test.

SUBGROUP: < 1000M					
Outcome (n: AT, CT, UPT)	INTERVENTION			Difference among groups	
	AT	CT	UPT	P value	Effect size (η_p^2)
Obstacle effect (%)					
T1 (14, 10, 8)	-17.1 ± 10.2	-23.9 ± 11.1	-18.9 ± 11.5	0.330 ^a	0.074
T2 (13, 10, 6)	-19.8 ± 10.1	-25.0 ± 13.6	-22.4 ± 17.4	0.637 ^a	0.034
Obstacle success rate (%)					
T1 (14, 10, 8)	100.0 (16.7-100.0)	100.0 (50.0-100.0)	75.0(0.0-100.0)	0.198 ^b	-
T2 (13, 10, 6)	100.0 (33.3-100.0)	91.7 (16.7-100.0)	91.7 (66.7-100.0)	0.696 ^b	-
DTE- walking speed (%)					
T1 (13, 10, 8)	-22.8 ± 15.3 [†]	-41.0 ± 15.7 [*]	-22.2 ± 18.6	0.023^a	0.237
T2 (12, 10, 6)	-22.4 ± 13.1	-28.1 ± 16.1 [*]	-11.1 ± 7.4	0.067 ^a	0.195
DTE- subtractions (%)					
T1 (12, 10, 8)	5.1 (-100.0-208.0)	2.0 (-62.8-55.6)	-22.1 (-100.0-58.8)	0.488 ^b	-
T2 (12, 10, 6)	-3.9 (-100.0-120.2)	20.8 (-26.2-77.3)	-10.9 (-100.0-31.3)	0.256 ^b	-

Measures related to obstacle avoidance performance and dual-task effects (DTE) in the adaptability treadmill (AT) group, conventional treadmill (CT) group and usual physical therapy (UPT) group directly after (T1) and four weeks after (T2) intervention. *P* values for group differences were obtained using ^a One-Way ANOVA and ^b Kruskal-Wallis test.

Significant group effects are presented in bold ($p < 0.05$). Post-hoc tests:

* Trend towards different from usual physical therapy (UPT) ($p < 0.05$)

† Trend towards different from conventional treadmill training (CT) ($p < 0.05$)

SUBGROUP: > 1000m					
Outcome (n: AT, CT, UPT)	INTERVENTION			Difference among groups	
	AT	CT	UPT	P value	Effect size (η_p^2)
FES-I (20-80)					
T0 (5, 7, 13)	40.6 ± 7.1	49.6 ± 12.7	45.5 ± 16.5	0.565 ^a	0.051
T1 (5, 7, 13)	50.4 ± 21.1 ^{*††}	31.9 ± 12.0	34.5 ± 11.2	0.015^b	0.331
T2 (4, 7, 11)	53.0 ± 15.3 ^{*†}	36.6 ± 11.7	34.7 ± 12.6	0.057 ^b	0.273
T3 (3, 5, 8)	43.3 ± 21.5 [*]	28.8 ± 5.8	24.8 ± 3.5	0.046^b	0.401
VAS (0-100)					
T0 (5, 7, 13)	71.5 ± 14.8	72.9 ± 18.3	62.7 ± 18.7	0.418 ^a	0.076
T1 (5, 7, 13)	85.0 ± 15.0	75.6 ± 19.7	78.1 ± 17.8	0.667 ^b	0.038
T2 (4, 7, 11)	87.3 ± 11.7	75.7 ± 13.7	82.1 ± 15.3	0.337 ^b	0.114
T3 (3, 5, 7)	66.7 ± 15.3	83.7 ± 13.7	76.4 ± 12.5	0.129 ^b	0.311
HOOS-Q (0-100)					
T2 (4, 7, 11)	40.6 ± 23.7	50.0 ± 24.5	55.7 ± 23.8	0.565 ^a	0.058
T3 (3, 5, 8)	62.5 ± 33.1	78.8 ± 25.6	83.6 ± 18.0	0.432 ^a	0.121
TMTa (s)					
T0 (5, 7, 13)	76.2 (48.8-148.0)	101.6 (50.8-127.0)	105.0 (49.0-177.0)	0.436 ^c	-
T1 (5, 7, 13)	75.1 ± 32.0	96.5 ± 54.0	80.5 ± 36.8	0.358 ^b	0.093
T2 (4, 7, 11)	59.4 ± 20.0	116.9 ± 85.7 [*]	64.3 ± 20.6	0.092 ^b	0.233
T3 (3, 5, 8)	62.1 ± 4.7	81.5 ± 52.5	84.1 ± 40.5	0.958 ^b	0.007
TMTb (s)					
T0 (5, 7, 13)	182.0 (100.0-300.0)	300.0 (110.8-300.0)	247.0 (80.0-300.0)	0.213 ^c	-
T1 (5, 7, 13)	188.3 ± 94.9	236.7 ± 75.7	193.2 ± 81.1	0.653 ^b	0.040
T2 (4, 7, 11)	177.0 ± 89.1	219.6 ± 82.5	189.4 ± 90.3	0.895 ^b	0.012
T3 (3, 5, 8)	212.3 ± 92.1	193.8 ± 86.3	215.0 ± 92.9	0.348 ^b	0.161

Measures related to fear of falling and general health in the adaptability treadmill (AT) group, conventional treadmill (CT) group and usual physical therapy (UPT) group at baseline (T0), directly after (T1), four weeks after (T2) and 12 months (T3) after the intervention. *P* values for group differences were obtained using ^a One-Way ANOVA, ^b ANCOVA with baseline performance as covariate and ^c Kruskal-Wallis test.

Significant group effects are presented in bold ($p < 0.05$). Post-hoc tests:

* Trend towards different from usual physical therapy (UPT) ($p < 0.05$)

†† Significantly different from conventional treadmill training (CT) ($p < 0.01$)

† Trend towards different from conventional treadmill training (CT) ($p < 0.05$)

SUBGROUP: < 1000m					
Outcome (n: AT, CT, UPT)	INTERVENTION			Difference among groups	
	AT	CT	UPT	P value	Effect size (η_p^2)
FES-I (20-80)					
T0 (14, 10, 8)	46.1 ± 13.6	41.3 ± 12.7	48.1 ± 12.4	0.514 ^a	0.045
T1 (14, 10, 8)	41.9 ± 13.8	39.3 ± 14.5	48.8 ± 17.1	0.586 ^b	0.037
T2 (13, 10, 6)	38.5 ± 12.7	38.9 ± 16.5	47.5 ± 22.4	0.497 ^b	0.054
T3 (5, 7, 6)	24.6 ± 6.1	28.4 ± 6.5	31.2 ± 8.1	0.491 ^b	0.097
VAS (0-100)					
T0 (14, 10, 8)	58.5 ± 18.6	64.3 ± 19.4	57.1 ± 25.1	0.718 ^a	0.023
T1 (13, 10, 8)	79.2 ± 16.7	84.2 ± 12.5	73.3 ± 14.4	0.382 ^b	0.069
T2 (13, 10, 6)	78.8 ± 20.0	84.6 ± 15.1	65.5 ± 13.6	0.152 ^b	0.140
T3 (5, 7, 6)	85.0 ± 15.8	82.3 ± 10.6	79.1 ± 13.0	0.796 ^b	0.032
HOOS-Q (0-100)					
T2 (13, 10, 6)	59.1 ± 31.3	62.5 ± 22.4	40.6 ± 8.6	0.235 ^a	0.105
T3 (5, 7, 6)	85.0 ± 14.4	64.3 ± 21.0	71.9 ± 20.4	0.217 ^a	0.184
TMTa (s)					
T0 (14, 10, 8)	98.5 (41.0-262.0)	98.0 (47.2-164.0)	75.0 (27.0-300)	0.643 ^c	-
T1 (14, 10, 8)	93.7 ± 45.2	74.3 ± 20.7	95.8 ± 85.5	0.223 ^b	0.102
T2 (12, 10, 6)	85.3 ± 42.5	84.5 ± 60.2	92.2 ± 79.6	0.966 ^b	0.003
T3 (5, 7, 6)	53.6 ± 18.5 [*]	80.6 ± 34.9	84.2 ± 44.4	0.056 ^b	0.338
TMTb (s)					
T0 (13, 10, 8)	299.0 (112.0-300.0)	231.0 (82.6-300.0)	200.0 (93.0-300.0)	0.797 ^c	-
T1 (13,10, 8)	228.7 ± 86.4	194.6 ± 79.3	212.6 ± 102.8	0.418 ^b	0.063
T2 (11, 10, 6)	205.7 ± 93.4	198.2 ± 86.3	195.4 ± 115.1	0.917 ^b	0.007
T3 (4, 7, 6)	191.7 ± 79.5	209.2 ± 100.0	196.9 ± 105.2	0.477 ^b	0.108

Measures related to fear of falling and general health in the adaptability treadmill (AT) group, conventional treadmill (CT) group and usual physical therapy (UPT) group at baseline (T0), directly after (T1), four weeks after (T2) and 12 months (T3) after the intervention. *P* values for group differences were obtained using ^a One-Way ANOVA, ^b ANCOVA with baseline performance as covariate and ^c Kruskal-Wallis test.
^{*} Post-hoc test showed a trend towards different from usual physical therapy (UPT) (*p*<0.05)

SUBGROUP: > 1000m

	AT (n=4)	CT (n=7)	UPT (n=10)
Number of falls	1	0	9
Observation time, person-years	4.0	6.6	9.6
Fall incidence rate, falls/person-years	0.25	0.0	0.92
Number (%) of fallers	1 (25.0)	0 (0)	5 (50.0)
Incidence rate ratio (95% CI), relative to UPT	0.27(0.03– 2.9, $p=0.281$)	-	
Relative risk (95% CI), relative to UPT	0.50 (0.08- 3.0, $p=0.580$)	- ($p=0.04$)	

Abbreviations. AT: adaptability treadmill, CT: conventional treadmill, UPT: usual physical therapy, CI: confidence interval.

SUBGROUP: < 1000m

	AT (n=10)	CT (n=9)	UPT (n=6)
Number of falls	10	11	11
Observation time, person-years	9.5	8.6	5.9
Fall incidence rate, falls/person-years	1.04	1.39	1.91
Number (%) of fallers	3 (30.0)	5 (55.6)	4(66.7)
Incidence rate ratio (95% CI), relative to UPT	0.55(0.14– 2.06, $p=0.371$)	0.73 (0.19-2.75, $p=0.640$)	
Relative risk (95% CI), relative to UPT	0.45 (0.15-1.36, $p=0.302$)	0.83 (0.37-1.88, $p=1.000$)	

Abbreviations. AT: adaptability treadmill, CT: conventional treadmill, UPT: usual physical therapy, CI: confidence interval.