

Appendix 1. Extracted data from the outcome measures of included RCTs.

Author/year of publication	Outcome measures	Baseline outcomes (before intervention outcome) (Mean and SD)		Post intervention outcome (Mean and SD)	
		Experimental group	Control group	Experimental group	Control group
L. Allet et al, 2010 ²¹	Speed tarred surface (ms ⁻¹)	1.2 (0.1)	1.2 (0.1)	1.3 (0.1)	1.2 (0.1)
	Speed cobblestone surface (ms ⁻¹)	1.0 (0.2)	1.1 (0.2)	1.1 (0.2)	1.0 (0.2)
	Cadence (stride min ⁻¹)	55.0 (5.4)	56.3 (5.3)	58.5 (5.1)	56.1(4.4)
	Cadence cobblestone (stride min ⁻¹)	50.9 (5.8)	52.5 (5.7)	55.8 (5.6)	52.5 (5.4)
	Gait cycle time tarred surface (s)	1.1 (0.1)	1.0 (0.1)	1.0 (0.1)	1.0 (0.08)
	Gait cycle time cobblestone (s)	1.2 (0.1)	1.1 (0.1)	1.0 (0.1)	1.1 (0.1)
	Stride length tarred surface (m)	1.3 (0.1)	1.3 (0.1)	1.3 (0.1)	1.3 (0.1)
	Stride length cobblestone (m)	1.2 (0.1)	1.2 (0.1)	1.2 (0.1)	1.2 (0.2)
Mueller MJ et al, 2013 ³⁸	6 minute walk distance (m)	378 (72)	418 (106)	404 (78)	417 (112)
	Average daily step count (steps)	4909 (1398)	6571 (2186)	5593 (1449)	6078 (2023)
BH EL-REFAY, OI ALI, 2013 ²⁰	Gait assessment of stance phase				
	Velocity (m/s)	0.7 (0.1)	0.7 (0.02)	0.8 (0.2)	0.7 (0.04)
	Cadence (steps/min)	82.9 (8.2)	85.3 (2.1)	89.5 (11.2)	85.5 (3.9)
	Step time (s)	0.8 (0.2)	0.8 (0.1)	0.6 (0.2)	0.8 (0.04)
	Double support time (s)	0.5 (0.1)	0.4 (0.1)	0.4 (0.1)	0.4 (0.02)
	Ankle ROM of stance phase (°)	19.4 (2.4)	18.6 (0.7)	20.4 (2.2)	18.6 (0.9)
Cristina D Sartor et al, 2014 ²⁵	Time-to-Peak pressure (PP)				
	Heel	17.4 (5.4)	17.9 (6)	17.7 (4.6)	18.1 (5.5)
	Lateral forefoot	82 (3.7)	80.3 (4.6)	80.3 (3.2)	80.7 (3.1)

	Midfoot	51.2 (16.6)	54.2 (14.3)	46.6 (12.7)	53.5 (13.6)
	Medial forefoot	81.9 (4.4)	81.9 (4.4)	81.7 (3.3)	82.1 (2.3)
	Hallux	85.0 (9.9)	85.8 (5.2)	84.8 (7.0)	85.6 (3.6)
	Toes	83.2 (9.9)	83.5 (6.0)	82.5 (3.8)	83.1 (4.0)
	COP–mean velocity(m/s)				
	Heel	0.4 (0.1)	0.4 (0.1)	0.4 (0.1)	0.4 (0.1)
	Midfoot	0.5 (0.1)	0.4 (0.1)	0.4 (0.1)	0.5 (0.1)
	Medial forefoot	0.3 (0.1)	0.3 (0.1)	0.3 (0.1)	0.3 (0.1)
	Lateral forefoot	0.3 (0.1)	0.3 (0.2)	0.2 (0.1)	0.3 (0.1)
	Hallux	0.1 (0.2)	0.2 (0.2)	0.2 (0.2)	0.2 (0.3)
	Toes	0.1 (0.1)	0.1 (0.2)	0.1 (0.1)	0.1 (0.1)
	Total	0.4 (0.1)	0.3 (0.05)	0.3 (0.0)	0.4 (0.04)
	Pressure–time integral (PTI)				
	Heel	81.0 (26.8)	79.1 (22.3)	87.6 (23.8)	79.1 (17.3)
	Midfoot	39.2 (14.7)	42.9 (20.9)	31.7 (9.1)	38.8 (20.6)
	Medial forefoot	101.2 (29.9)	90.2 (28.3)	103.7 (25.7)	93.8 (20.5)
	Lateral forefoot	92.4 (22.4)	90.9 (24.6)	88.2 (19.7)	92.6 (20.5)
	Hallux	47.2 (21.4)	48.6 (22.6)	49.5 (24.6)	50.6 (19.2)
	Toes	50.6 (22.9)	48.0 (24.1)	52.6 (21.4)	44.5 (22.6)
	Functional tests				
	Ankle flexion	4.0 (1.0; 4.0)	3.5 (1.0; 4.0)	3.0 (1.0; 4.0)	3.0 (1.0; 4.0)
	Ankle extension	4.0 (4.0; 4.0)	4.0 (4.0; 4.0)	4.0(4.0; 4.0)	4.0 (4.0; 4.0)
	Toes flexion	4 (3.0; 4.0)	4.0 (3.0; 4.0)	4.0 (4.0; 4.0)	3.5 (3.0; 4.0)

	Toes extension	4.0 (4.0; 4.0)	4.0 (3.3; 4.0)	4.0 (4.0; 4.0)	4.0 (4.0; 4.0)
Melai et al, 2014 ³⁶	Gait Velocity (m/s)	-.09 (-.13, -.05)	.01 (-.01, .03)	-.02 (-.06, .02)	.01 (-.02, .03)
	Stride length	-.06 (-.09, .03)	.01 (-.03, .05)	-.004 (-.04, .03)	.003 (-.04, .04)
	Stride time	.04 (.01, .07)	-.002 (-.03, .02)	.02 (-.01, .04)	-.01 (-.03, .02)
Taveggia G et al, 2014 ³⁷	6-Minute Walk Test	330.1 (151.1)	313.8 (102.9)	395.7 (111.6)	373.5 (112.1)
	10-Meter Walking Test	0.8 (0.3)	0.8 (0.2)	0.8 (0.4)	1.0 (0.5)
	Tinetti scale walk	9.7 (1.9)	9.9 (1.9)	11.4 (3.4)	10.4 (2.0)
Grewal GS et al, 2015 ³⁹	Time spent sitting, %	49.8 (15.3)	45.9 (20.2)	49.8 (16.3)	48.9 (17.8)
	Time spent standing, %	13.7 (4.9)	14.7 (6.5)	15.9 (5.1)	14.6 (7.0)
	Time spent walking, %	6.7 (3.4)	7.5 (5.6)	8.5 (3.9)	7.2 (5.4)
	Total steps taken, n	8656 (4,589)	9,785 (8,081)	11,052 (5,365)	9264 (7,670)
Saleh, et al 2019 ⁴⁰	Step length (cm)	51.6 (2.8)	52.0 (3.4)	59.8 (3.0)	56.2 (3.2)
	Step time (sec)	0.6 (0.05)	0.6 (0.06)	0.4 (0.08)	0.5 (0.07)
	Double support time (sec)	0.3 (0.04)	0.3 (0.03)	0.2 (0.05)	0.2 (0.04)
	Velocity (cm/sec)	71.8 (6.8)	70.9 (8.0)	80.0 (6.8)	74.1 (7.9)
	Cadence (step/min)	82 (2.9)	80 (5.6)	98.0 (5.2)	88.0 (4.7)
Suzuki, K et al, 2019 ²²	Gait speed (m/s)	1.2 (0.1)	1.2 (0.1)	1.5 (0.1)	1.3 (0.2)
	Step length (m)	0.6 (0.1)	0.6 (0.1)	0.6 (0.1)	0.6 (0.1)
	Cadence (step/min)	124.2 (11.1)	122.9 (7.4)	131.0 (9.0)	125.2 (10.7)