

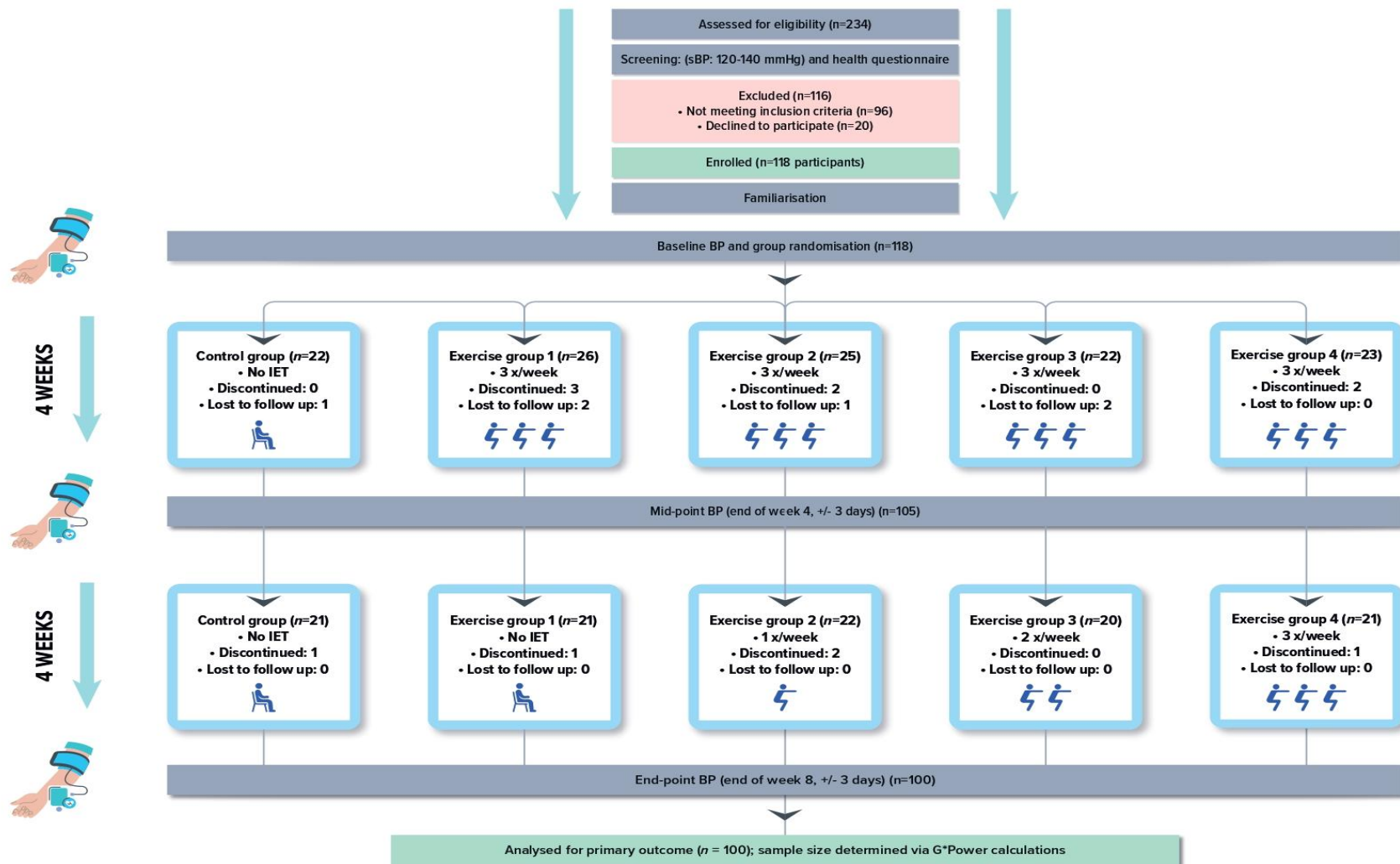


Table 2 Mean values for systolic, diastolic and mean blood pressure in each group

Group (p/week)		Baseline (mmHg)		95% CI		Week 4 (mmHg)		95% CI		Week 8 (mmHg)		95% CI	
3x/week	sBP	131.2 ± 5.74		± 2.57 (128.51 – 133.89)		122.37 ± 7.77		± 3.48 (118.89 – 125.85)		117.47 ± 6.39**		± 2.86 (114.61 – 120.33)	
	dBp	84.39 ± 8.45		± 3.78 (81.16 – 88.62)		79.64 ± 6.71		± 3.00 (76.64 – 82.64)		76.17 ± 10.04		± 4.49 (71.68 – 80.66)	
	MAP	100.0 ± 6.61		± 2.96 (97.04 – 102.96)		93.88 ± 6.57		± 2.94 (90.94 – 96.82)		89.94 ± 8.25**		± 3.70 (86.24 – 93.64)	
2x/week	sBP	129.44 ± 6.53		± 2.52 (126.91 – 131.97)		118.84 ± 7.36		± 3.25 (115.59 – 122.09)		122.49 ± 7.48**		± 2.72 (119.77 – 125.21)	
	dBp	84.02 ± 10.91		± 4.25 (79.77 – 88.27)		76.56 ± 10.42		± 4.07 (72.49 – 80.63)		79.78 ± 8.96		± 3.90 (75.88 – 83.68)	
	MAP	99.16 ± 8.62		± 3.84 (95.32 – 103.00)		90.65 ± 9.09		± 4.13 (86.52 – 94.59)		94.02 ± 8.04*		± 3.59 (90.43 – 97.61)	
1x/week	sBP	129.89 ± 5.25		± 2.35 (127.54 – 132.24)		118.94 ± 5.25		± 2.35 (116.59 – 120.89)		123.33 ± 7.19*		± 2.41 (120.93 – 125.75)	
	dBp	84.96 ± 9.23		± 4.12 (80.84 – 89.08)		79.11 ± 8.47		± 3.78 (75.33 – 82.89)		80.80 ± 8.24		± 3.68 (77.12 – 84.48)	
	MAP	99.94 ± 6.94		± 3.10 (96.84 – 103.04)		92.39 ± 6.56		± 2.93 (89.37 – 95.21)		94.98 ± 7.15*		± 3.20 (91.78 – 98.18)	
0x/week	sBP	131.54 ± 5.7		± 2.55 (128.65 – 133.75)		124.13 ± 7.36		± 3.26 (120.88 – 127.40)		127.66 ± 4.40		± 1.97 (125.69 – 129.63)	
	dBp	83.23 ± 8.75		± 3.92 (79.31 – 86.69)		79.42 ± 8.1		± 3.67 (75.75 – 83.09)		82.75 ± 7.53		± 3.36 (79.39 – 86.11)	
	MAP	99.33 ± 6.37		± 2.85 (96.48 – 101.18)		94.32 ± 6.62		± 2.83 (91.49 – 97.15)		97.72 ± 4.44		± 2.36 (95.36 – 100.08)	
Control	sBP	127.77 ± 5.99		± 2.52 (125.25 – 130.29)		126.98 ± 6.0		± 2.69 (124.25 – 129.61)		128.59 ± 6.27		± 2.80 (125.79 – 131.39)	
	dBp	80.91 ± 10.08		± 4.52 (76.49 – 85.53)		83.1 ± 8.25		± 3.69 (79.31 – 86.69)		82.80 ± 9.91		± 4.02 (78.78 – 86.82)	
	MAP	96.53 ± 7.56		± 3.38 (93.15 – 100.05)		97.73 ± 5.6		± 2.51 (95.22 – 100.18)		98.06 ± 6.89		± 3.09 (94.91 – 101.09)	

Mean values and standard deviation (SD), and 95% confidence intervals (CI) for resting systolic (sBP), diastolic (dBp) and mean arterial (MAP) blood pressure at baseline, week 4 and week 8 in the training and control conditions.* P<0.05 and **<0.001 for difference to control conditions at week 8.

Table 1. Participant demographics for all experimental and control groups

Variable	Control	0x/week	1x/week	2x/week	3x/week
Sex (M:F)	12:8	11:9	10:10	11:9	11:9
Age	34 ± 7	40 ± 9	40 ± 13	38 ± 10	35 ± 13
Body mass	74 ± 12	78 ± 9	82 ± 16	80 ± 11	83 ± 15
Height	174 ± 8	172 ± 10	173 ± 8	175 ± 10	175 ± 10
Baseline BP	128/81	132/83	130/85	129/84	131/84
MET-mins	512 ± 12	485 ± 32	548 ± 22	526 ± 24	496 ± 19

Mean values and SD for age (years), body mass (kg), and height (cm). Baseline BP is given as sBP/dBP mmHg. MET mins is calculated as mean and SD MET-mins p/week for each group at baseline. The male and female (M:F) participants ratio for each group are also presented.

Table 3 Mean values for total peripheral resistance, heart rate, cardiac output, and stroke volume

Mean values and SD for resting heart rate (HR bpm), total peripheral resistance (TPR dyne/s/cm⁵), TPR index (TPRi dyne/s/m²/cm⁵), cardiac output ($\dot{Q}$ l/min), cardiac output index ($\dot{Q}$ i l/min / m²), stroke volume (SV ml) and SV index (SI ml/m²) before, during and after the training and control conditions.* P<0.05 for difference between experimental and control conditions.

Group		Baseline	Week 4	Week 8
3x p/week	HR	72.47 ± 6.15	70.02 ± 9.73	69.65 ± 10.3
	TPR	1462.82 ± 428.99	1356.57 ± 386.75	1262.78 ± 362.79
	TPRi	741.63 ± 216.98	693.85 ± 210.83	642.16 ± 196.1
	SV	83.25 ± 22.46	83.52 ± 14.77	87.07 ± 13.76
	Si	42.86 ± 13.81	42.74 ± 10.02	44.56 ± 9.58
	Q	5.98 ± 1.48	5.79 ± 1.0	6.03 ± 1.12
	Qi	3.07 ± 0.92	2.95 ± 0.63	3.16 ± 1.01
2x p/week	HR	71.64 ± 10.41	68.67 ± 9.1	69.73 ± 11.68
	TPR	1406.26 ± 556.82	1287.89 ± 363.13	1319.32 ± 470.66
	TPRi	732.25 ± 306.83	666.88 ± 196.98	691.3 ± 278.73
	SV	85.05 ± 19.82	83.58 ± 23.29	85.88 ± 33.88
	Si	43.78 ± 9.32	43.18 ± 11.54	43.99 ± 15.85
	Q	6.15 ± 1.89	5.67 ± 1.37	5.9 ± 2.34
	Qi	3.17 ± 0.95	2.95 ± 0.77	3.04 ± 1.16
1x p/week	HR	76.63 ± 11.15	74.03 ± 12.7	74.22 ± 11.58
	TPR	1383.51 ± 445.53	1229.65 ± 400.62	1453.62 ± 445.01
	TPRi	710.49 ± 212.44	632.4 ± 206.78	744.21 ± 214.62
	SV	76.0 ± 16.47	76.31 ± 20.25	72.19 ± 22.22
	Si	39.53 ± 9.81	39.56 ± 10.79	37.79 ± 13.24
	Q	5.84 ± 1.74	5.54 ± 1.44	5.39 ± 2.01
	Qi	3.03 ± 0.93	2.87 ± 0.76	2.83 ± 1.19
0x p/week	HR	71.78 ± 10.92	69.45 ± 9.86	70.19 ± 8.11
	TPR	1519.87 ± 370.37	1222.63 ± 393.7	1709.36 ± 468.66
	TPRi	808.68 ± 218.48	649.02 ± 219.05	905.14 ± 253.46
	SV	79.7 ± 25.74	78.96 ± 13.78	79.52 ± 22.23
	Si	42.2 ± 13.31	41.91 ± 8.04	42.11 ± 12.04
	Q	5.64 ± 1.62	5.46 ± 1.12	5.54 ± 1.53
	Qi	2.98 ± 0.82	2.89 ± 0.62	2.93 ± 0.84
Control	HR	68.28 ± 10.83	67.93 ± 6.76	69.5 ± 9.04
	TPR	1420.38 ± 533.74	1475.98 ± 439.61	1546.68 ± 428.31
	TPRi	771.69 ± 330.44	803.46 ± 283.72	827.8 ± 244.6
	SV	81.22 ± 18.91	84.15 ± 23.93	78.73 ± 22.48
	Si	43.3 ± 9.88	44.69 ± 11.81	42.32 ± 13.59
	Q	5.5 ± 1.36	5.69 ± 1.69	5.5 ± 1.87
	Qi	2.94 ± 0.77	3.03 ± 0.86	2.96 ± 1.12

Table 4 Mean values for heart rate variability and baroreceptor sensitivity

Mean values and SD for low frequency normalised units (LFnu %), high frequency normalised units (HFnu %), low frequency (LF ms²), high frequency (HF ms²), low/high frequency ratio (LF:HF), power spectral density (PSD–RRI ms²) and baroreceptor reflex sensitivity (BRS ms/mmHg). * P<0.05 and **P<0.001 for difference between experimental and control conditions.

Group		Baseline	Week 4	Week 8
3x p/week	Lfnu	71.7 ± 13.95	58.07 ± 17.32	55.12 ± 15.97
	Hfnu	28.3 ± 13.95	41.93 ± 17.32	44.88 ± 15.97
	LF	811.05 ± 462.45	1111.31 ± 749.41	1310.99 ± 760.66
	HF	452.28 ± 450.49	820.92 ± 541.1	1199.76 ± 711.93
	LF:HF	3.11 ± 2.48	1.73 ± 1.52	1.61 ± 1.63
	PSD	1840.56 ± 820.6	2876.11 ± 816.75	3085.37 ± 1895.59
	BRS	11.84 ± 5.57	19.04 ± 14.17	21.39 ± 11.42
2x p/week	Lfnu	59.22 ± 16.7	50.22 ± 18.89	62.14 ± 17.32
	Hfnu	40.78 ± 16.7	49.78 ± 18.89	37.86 ± 17.32
	LF	1441.14 ± 1477.24	1644.95 ± 1818.83	1015.12 ± 735.86
	HF	707.12 ± 519.06	1378.63 ± 1549.82	734.97 ± 1160.88
	LF:HF	2.24 ± 1.63	1.56 ± 0.99	2.66 ± 2.08
	PSD	2732.86 ± 1704.76	3237.52 ± 1987.43	2493.23 ± 1892.44
	BRS	14.27 ± 5.41	24.4 ± 7.02	18.67 ± 9.57
1x p/week	Lfnu	67.17 ± 17.18	57.11 ± 16.71	65.29 ± 14.14
	Hfnu	32.83 ± 17.18	42.89 ± 16.71	34.71 ± 14.14
	LF	764.01 ± 589.8	857.7 ± 873.4	557.33 ± 393.12
	HF	388.34 ± 410.01	780.2 ± 795.25	387.51 ± 451.17
	LF:HF	2.7 ± 1.36	2.0 ± 2.06	2.41 ± 1.57
	PSD	1583.79 ± 965.43	2281.32 ± 1392.42	1410.4 ± 971.69
	BRS	11.48 ± 5.99	20.7 ± 12.38	12.69 ± 8.57
0x p/week	Lfnu	68.96 ± 15.78	59.08 ± 16.17	66.37 ± 14.0
	Hfnu	31.04 ± 15.78	40.92 ± 16.17	33.63 ± 14.0
	LF	1123.34 ± 771.58	1458.7 ± 961.24	893.61 ± 643.33
	HF	533.97 ± 526.4	1406.5 ± 1486.9	396.76 ± 325.38
	LF:HF	3.36 ± 2.28	1.68 ± 0.99	2.88 ± 1.89
	PSD	2122.7 ± 1392.0	3553.72 ± 2153.31	1839.13 ± 1138.11
	BRS	13.07 ± 7.64	21.5 ± 13.07	11.77 ± 7.49
Control	Lfnu	71.15 ± 14.11	66.84 ± 17.29	68.74 ± 16.75
	Hfnu	28.85 ± 14.11	33.16 ± 17.29	31.26 ± 16.75
	LF	944.4 ± 700.55	1040.12 ± 800.78	1196.18 ± 1190.88
	HF	597.77 ± 662.89	537.82 ± 605.9	571.42 ± 756.4
	LF:HF	2.84 ± 2.35	3.17 ± 2.37	3.23 ± 2.11
	PSD	2080.82 ± 1674.91	2049.28 ± 1296.02	1909.39 ± 1527.03
	BRS	13.48 ± 8.83	15.74 ± 5.71	13.12 ± 3.38

There were no adverse events associated with this study.