

Table II - Summary of the evaluation process, intervention, outcomes and main results of the studies reviewed

Author / year	Intervention protocols		Methods	Main outcomes	Results
	Exercise group	Control group			
Cornelissen et al., 2005 [16]	Isotonic and isometric RE for arms, trunk and legs. Protocol: 1-14 exercises, 1-4 sets, 1-25 rep, 30 – 90% of 1MR, 3-4x week, 6-26 weeks.	CGWI and, normal lifestyle, and physical activity routines, receiving calls for lifestyle consultations and BP measurements	BP measurement method not declared.	SBP, DBP, HR, VO _{2max}	<p>- Exercise groups showed mean net changes in SBP of +2 to -16.8 mmHg and of +1.4 to -16.5 mmHg for DBP.</p> <p>- The overall combined effect of training on SBP and DBP was 3.2 mmHg (P ¼ 0.10) and 3.5 mmHg (P < 0.01).</p> <p>- VO_{2max} significantly increased by 10.5% [95% CI (CL) 1.2–19.4%] after training.</p> <p>- There was no significant change in HR.</p>
Cornelissen et al., 2011 [17]	Isotonic and isometric RE with weight machines and elastic bands for upper and lower limbs. Protocol: 6 – 30 repetitions, 1-14 exercises performed, 1-6 exercise sessions for each muscle group, 2 – 3 sessions per week, from 6 to 52 weeks, from 30%-100% 1RM or, 30%-40 % of MVC. The ERI 4x2 minutes, bilateral or unilateral, 3 minutes of rest and 1 minute between contractions.	CGWI or, stretching 3x a week, normal lifestyle, and physical activity routines, participated in continuing education sessions on exercise and BP	BP measurements in supine and sitting positions, with manual and semi-automatic sphygmomanometer	BP, VO _{2Peak}	<p>- RE induced a significant decrease in BP (P 0.01), with a mean reduction of 3.9 in SBP (95% CL, 6.2; 1.5) and 3.6 in DBP (95% CL, 5.0; 2.1) mmHg.</p> <p>- IRE resulted in a greater reduction in BP [-13.5 (-16.5; -10.5) SBP/-6.1(-8.3; -3.9) DBP mm Hg], when compared to DRE.</p> <p>- VO_{2Peak} increased by 10.6% after DRE (P = 0.01).</p>

Cornelissen et al., 2013 [18]	Isotonic and isometric RE Protocol: 4-52 weeks, 1-7 times a week, 30%-70% of 1RM, 30%-40% for TRI	CGWl e, Normal Lifestyle, and Physical Activity Routines, Taking Lifestyle Consultation Calls, and Participating in Continuing Education Sessions on Exercise and BP	BP measurements in supine and sitting positions, with manual and semi-automatic sphygmomanometers and ABPM	BP	<p>- Statistically significant reductions were found for SBP after ARE (3.5 mm Hg [4.6 to 2.3], DRE (1.8 mm Hg [3.7 to 0.011], P = 0.049) and IRE (10.9 mm Hg [14.5 to 7.4], P < 0.0001), but not after EC (1.4 mm Hg [4.2 to +1.5], P = 0.34).</p> <p>- DBP was significantly reduced after ARE (2.5 mm Hg [3.2 to 1.7], P < 0.0001), TRD (3.2 mm Hg [4.5 to 2.0], P < 0.0001), IRE (6.2 mm Hg [10.3 to 2.0], P = 0.003) and EC (2.2 mm Hg [3.9 to 0.48], P = 0.012). there were no significant differences between the effects of ARE, IRE and EC on SBP and DBP (P > 0.05 for all).</p> <p>- There was no significant difference between ARE, DRE, IRE and CE in SBP and DBP.</p>
Carlson et al., 2014 [19]	IRE with handgrip and leg exercises. Protocols over 4 weeks with 4x2 minutes of 30-50% of MVC and 1 to 3 minutes of rest.	Control group with guidelines	Automated BP measurements, waveform analysis, and auscultation	SBP, DBP, MAP, CRF	<p>- The IRE had a mean SBP difference (MD), 6.77 mm Hg (95% CI, 7.93 to 5.62 mm Hg; P < 0.001); and DBP, 3.96 mm Hg (95% CI, 4.80 to 3.12 mm Hg; P < 0.001); and MAP, 3.94 mm Hg (95% CI, 4.73 to 3.16 mm Hg; P < 0.001). A slight reduction in CRF was also observed (MD, 0.79 beats/min; 95% CI, 1.23 to 0.36 beats/min; P = 0.003)</p>
Inder et al., 2015 [11]	IRE with handgrip and leg exercises. Protocol: 3-5 days a week, 3-10 weeks	CG without intervention	Automated BP, Doppler and Auscultation measurements	SBP, DBP, MAP	<p>- (MD) SBP – 5.20 mm Hg (95% CI) – 6.08 to – 4.33, P < 0.00001; DBP: MD – 3.91 mm Hg (95% CI – 5.68 to – 2.14, P < 0.00001); MAP: MD – 3.33 mm Hg (95% CI – 4.01 to – 2.66, P < 0.00001).</p> <p>- Subjects who performed ≥ 8 weeks of IRE demonstrated a greater reduction in SBP: MD – 7.26 mm Hg</p>

					(95% CI – 8.47 to – 6.04) and MAP: MD – 4.22 mm Hg (95% CI – 5.08 to – 3.37) than those who performed 8 weeks.
Valenciano et al., 2019 [20]	IRE MMSS and MMII 3-12 weeks, 3-5 days, intensity 5 - 35% 1MR	CG Not specified	Automated BP, doppler and auscultation measurements	SBP, DBP and MAP	- IRE showed statistically significant ($P < 0.05$) and clinically relevant (>2 mmHg) positive effects on SBP (5.23 mmHg) and MAP (2.9 mmHg). The IRE showed a statistically significant but not clinically relevant reduction in DBP (1.64 mmHg).
Betancur et al., 2020 [21]	IRE for upper limbs and lower limbs 4 x 2 – 3 minutes, 10% - 34% of MVC	CG Not specified	Brachial oscillometry, Automated BP measurements, Doppler and Auscultation	SBP, DBP, MAP	- Clinically relevant and statistically significant reductions in SBP (-2.83 mm Hg; $P < 0.00001$), DBP (-2.73 mm Hg; $P = 0.0003$), and MAP (-3.07 mm Hg; $P = 0.005$) in normotensive adult participants. However, substantial heterogeneity has been reported for MAP

RE = Resistance Exercise; **1MR** = 1 Maximum repetition; **CGWI** = Control Group without Intervention; **BP** = Blood Pressure; **SBP** = Systolic Blood Pressure; **DBP** = Diastolic Blood Pressure; **MAP** = Mean Arterial Pressure; **HR** = Heart Rate; **VO_{2max}** = Maximum Oxygen Volume ; **MVC** = Maximum Voluntary Contraction; **IRE** = Isometric Resistance Exercise; **CRF** = Cardiovascular Risk Factors; **ABPM** = Ambulatory Blood Pressure Monitoring; **ARE** = Aerobic Resistance Exercise; **DRE** = Dynamic Resistance Exercise; **CE** = Combined Exercise; **RHR** = Resting Heart Rate