Table 1. Biometric characteristics of the young and middle-aged groups

	Young (n = 20)	*Middle-aged (n = 20)*	*Effect size*
Age (y)	21.0 ± 1.6	42.6 ± 6.7*	4.55 (very large)
Stature (m)	1.80 ± 0.10	1.80 ± 0.10	0 (none)
Mass (kg)	85.9 ± 12.8	82.3 ± 11.2	0.31 (small)
Fat-free mass (kg)	77.0 ± 10.7	69.0 ± 8.6*	0.85 (moderate)
Fat mass (kg)	10.1 ± 4.5	14.3 ± 4.5*	0.96 (moderate)
Body fat percentage	11.6 ± 4.0	17.2 ± 4.1*	1.42 (large)
Bench press 1RM (kg)	104.3 ± 17.2	85.1 ± 16.2*	1.18 (moderate)
Squat 1RM (kg)	137.5 ± 26.3	99.4 ± 28.6*	1.42 (large)
Bent-over-row 1RM (kg)	96.5 ± 14.7	83.9 ± 12.3*	0.95 (moderate)

*significantly different to Young group ($P < 0.05$)

Table 2. Training characteristics of the young and middle-aged groups

	Young	*Middle-aged*
Years of resistance training (mean ± SD)	4.5 ± 1.1	16.9 ± 11.4*
Weekly frequency **		
1 to 2	1 (5)	7 (35)
3 to 4	13 (65)	12 (60)
5+	6 (30)	1 (5)
Session duration **		
0 to 30 minutes	0 (0)	3 (15)
31 to 60 minutes	6 (30)	16 (80)
61 to 90 minutes	12 (60)	1 (5)
90+ minutes	2 (10)	0 (5)
Reason for resistance training **		
Strength	11 (55)	7 (35)
Hypertrophy	9 (45)	3 (15)
Fat loss	0 (0)	0 (0)
Health	0 (0)	10 (50)

*significantly different to Young group ($P < 0.05$). **significant trend ($P < 0.05$)
Brackets denote percentage of responses in each category.

Table 3. Partial correlations for velocity (controlling for 1RM) and 1RM (controlling for velocity) with optimal power.

	Bench press		**Squat**		**Bent-over-row**	
Group	Velocity	1RM	Velocity	1RM	Velocity	1RM
Young	.404	.863*	.653*	.877*	.379	.725*
Middle-aged	.782*	.846*	.591*	.614*	.753*	.711*

*significant correlation ($P < 0.05$)