Supplemental material

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BMJ Open Sp Ex Med

<u>Supplementary material 1.1</u>

Abbreviations:

DF:	duty factor
SF:	stride frequency
FzMax:	maximal vertical ground reaction force
VILR:	vertical instantaneous loading rate
PBF:	peak braking force

The following table (table i) contains the results of the multiple linear regression analysis using a stepwise selection procedure for multiple speed steps (1.6, 1.8, 2.0 and 2.2 m.s^{-1} for n = 14) with the independent variables DF and SF and the dependent variables FzMax, PBF and VILR. Only significant results are presented in the table. Figures in supplementary material 1.2 show the correlations (univariate R²-values are presented on top of each graph) between the independent variables (DF and SF) and the dependent variables (FzMax, PBF and VILR) for these speeds.

Table i: significant results of the multiple linear regression analysis at multiple speed steps.

	Duty factor			
	R²-value	B-value	CI	p-value
Speed 1.6				
FzMax	0.726	-0.033	[-.045 -.020]	< 0.001
Speed 1.8				
FzMax	0.725	-0.030	[-.042 -.019]	< 0.001
PBF	0.545	0.003	[.001 .005]	0.004
Speed 2.0				
FzMax	0.768	-0.027	[-.041 -.013]	0.001
PBF	0.668	0.004	[.002 .006]	0.001
Speed 2.2				
FzMax	0.663	-0.036	[-.052 -.020]	< 0.001
PBF	0.426	0.003	[.001 .006]	0.016