Supplemental digital content 6

Title: Modeling the recovery of W' in the moderate to heavy exercise intensity domain.
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This document contains data and analysis details of CP$_{fr}$ versus CP$_{ft}$

Abbreviations used in the document

d – Cohen's effect size; n – Number of data points/observations.
CP$_{fr}$ – CP of the four fresh 3MTs.
CP$_{ft}$ – CP computed from the 3-minute all out interval of the intermittent test.
U, z – Test statistics from the Mann-Whitney U test; t – Test statistic from the Independent samples t-test.

Subject-wise CP$_{fr}$ and CP$_{ft}$

Table SDC-6.1 CP$_{fr}$ and CP$_{ft}$ for all subjects		
Subject	**CP$_{fr}$ (W)**	**CP$_{ft}$ (W)**
	271	274
	267	278
		284
		277
1		274
		278
		285
		273
		285
	231	282
	234	259
		260
		246
2		247
		263
		261
		257
		238

Table SDC-6.1 (continued) CP_{fr} and CP_{ft} for all subjects

Subject	CP_{fr} (W)	CP_{ft} (W)
	335	361
	334	349
	327	360
	343	332
3		348
		352
		348
		352
		340
	211	200
	215	218
	220	227
	224	211
4		218
		201
		207
		203
		191
	246	251
	237	259
	245	244
	242	253
5		258
		254
		254
		263
		237

Subject	CP_{fr} (W)	CP_{ft} (W)
	195	203
	217	207
	212	215
	200	194
6		215
		216
		210
		213
		210

Details of statistical analyses:

Group level: Mann-Whitney U test conducted due to a violation of normality assumption.

Results:

Table SDC-6.2 Mann-Whitney U test results excluding Subject 7*

CP	Mean ± SD	n	Shapiro-Wilk p-value	Mann-Whitney U test results			
				Mean rank	U	Standardized test-stat, z	p-value
CP_{fr}	250 ± 47	20	0.0035	33.48	620.50	0.980	0.327
CP_{ft}	259 ± 49	54	0.0005	38.99			

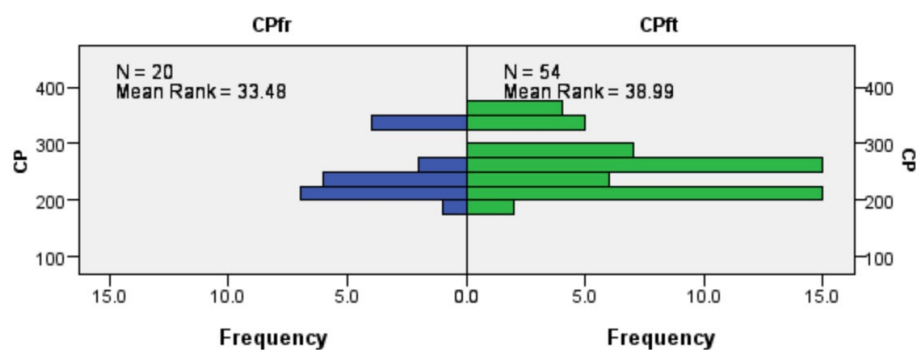*Subject 7 excluded due to reasons discussed in the manuscript.

Figure SDC-6.1 Dissimilar frequency distributions of CP_{fr} and CP_{ft}

Subject level: Independent sample t-tests were conducted due to unequal sample sizes. CP data from subjects 1 and 2 were not analyzed at subject level as they did only two fresh 3MTs. Data from Subject 7 were excluded due to reasons discussed in the manuscript.

Results:

Table SDC-6.3 t-test results for Subject 3

CP	Mean ± SD	n	Shapiro-Wilk p-value	Levene's test p-value	Mean diff., 95%CI	t	p-value	Cohen's d
CP_{fr}	335 ± 7	4	0.836	0.476	-13 (-25, -2)	-2.602	0.025	1.56
CP_{ft}	348 ± 9	9	0.765					

Table SDC-6.4 t-test results for Subject 4

CP	Mean ± SD	n	Shapiro-Wilk p-value	Levene's test p-value	Mean diff., 95%CI	t	p-value	Cohen's d
CP_{fr}	217 ± 6	4	0.914	0.201	9 (-4, 22)	1.485	0.166	0.89
CP_{ft}	208 ± 11	9	0.937					

Table SDC-6.5 t-test results for Subject 5

CP	Mean ± SD	n	Shapiro-Wilk p-value	Levene's test p-value	Mean diff., 95%CI	t	p-value	Cohen's d
CP_{fr}	242 ± 4	4	0.632	0.396	-10 (-20, -1)	-2.460	0.032	1.48
CP_{ft}	253 ± 8	9	0.529					

Table SDC-6.6 t-test results for Subject 6

CP	Mean ± SD	n	Shapiro-Wilk p-value	Levene's test p-value	Mean diff., 95%CI	t	p-value	Cohen's d
CP_{fr}	206 ± 10	4	0.707	0.210	-3 (-14, 7)	-0.670	0.512	0.40
CP_{ft}	209 ± 7	9	0.078					