***Supplemental file***

The inter-day reliability of the power outputs, ROF and PACES responses to both experimental conditions was examined using Pearson correlation analysis. Values ≤0.1, between 0.1-0.3, between 0.3-0.5, between 0.5-0.7, between 0.7-0.9 and >0.9 were interpreted as trivial, small, moderate, large, very large, and nearly perfect.1 To complement the correlation analysis, the level of agreement between the sessions was examined with Bland-Altman bias estimates. The 95% CI of the mean difference was used to determine systematic bias.2 Reliability scores of all variables are reported in the table below. The majority of the performance scores were reliable except for the bench press exercise Pmean scores during the predetermined condition. Conversely, low reliability but no systematic biases were observed for the ROF responses and PACES scores across all exercises in both conditions.

**Table S1. Reliability scores of all the collected measures**

LoA: limits of agreement; Pmean: mean propulsive power; ROF: rate of fatigue; PACES: physical activity enjoyment scale

|  |  |
| --- | --- |
|  | Reliability Measures |
| **Pearson correlation****r** | **95% of measures within 2 SD of LoA mean** |
| **Predetermined** | **Self-selected** | **Predetermined** | **Self-selected** |
| Power outputsSquat Pmean | 0.9 | 0.6 | Yes | Yes |
| Jump squat Pmean | 1.0 | 0.5 | Yes | Yes |
| Bench press Pmean | 0.9 | 0.7 | No | Yes |
| Bench throw Pmean | 0.9 | 0.8 | Yes | Yes |
| ROFBaselineBack squatJump squatBench pressBench throw | 0.30.20.60.30.6 | 0.30.30.20.10.1 | YesYesYesYesYes | YesYesYesYesYes |
| PACES | 0.5 | 0.1 | Yes | Yes |
|  |

**References**

1. Hopkins WG. Linear models and effect magnitudes for research, clinical and practical applications. *Sportscience*. 2010;14:49-57.
2. Leech, N, Onwuegbuzie, A. A call for greater use of nonparametric statistics. 2003.