

Supplementary Table 3: Estimates of among-horse (V_H) and residual (V_R) variance in race time from mixed effect models of datasets. Also shown is the repeatability (R) calculated as the ratio of V_H to phenotypic variance (conditional on all fixed effects in the model, including year as a factor). Statistical inference on V_H is based on likelihood ratio comparison of full and reduced models (see text for details).

Dataset	Years	Classes	Runners	V_H	V_R	R	χ^2_1	P
2.1)	1850-2012	Elite	Winners	0.037±0.006	0.15±0.005	0.20±0.03	184.22	<0.001
2.2)	1997-2012	Elite	Winners	0.013±0.004	0.10±0.005	0.11±0.04	9.8	0.002
2.3)	1997-2012	Elite	All	0.019±0.002	0.16±0.002	0.11±0.008	317.58	<0.001
2.4)	1997-2012	All	Winners	0.016±0.001	0.13±0.001	0.11±0.005	746.3	<0.001
2.5)	1997-2012	All	All	0.071±0.001	0.20±0.001	0.26 (0.002)	10274.2	<0.001