Supplementary Material

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| **Supplementary Table 5.** Differences between crews in the effects of the technical variables shown in Supplementary Table 2, with adjustment for power in the four boat classes. Data are SD (%), ±90% compatibility limits (approximate), with observed magnitude and p values for non-inferiority and non-superiority tests (p–/p+). |
|  | M1x | W1x  | M2-  | W2-  |
| **Time and velocity variables** |
| Stroke rate | 2.2, ±1.1;large\*\*\*0.03/0.97 | 1.1, ±0.8;mod\*\*0.05/0.95 | —a | 1.0, ±1.0;mod0.08/0.91 |
| Within-stroke velocity range | 0.5, ±0.7; mod0.17/0.79 | 0.8, ±0.7; large0.07/0.91 | 0.4, ±0.8; small0.31/0.65 | 0.7, ±0.9; mod0.14/0.84 |
| Time form catch to minimum velocity | 1.2, ±1.1;large0.03/0.97 | 0.5, ±0.5;mod0.10/0.85 | 0.2, ±0.5;small0.29/0.58 | 0.2, ±0.4;small0.04/0.90 |
| Distance per stroke | 1.8, ±0.8;v.large\*\*\*0.03/0.97 | 1.7, ±0.9;v.large\*\*\*0.05/0.94 | 0.7, ±1.3;mod0.11/0.88 | 1.3, ±1.1;v.large0.06/0.94 |
| **Force variables** |
| Mean force | 2.4, ±0.8;e.large\*\*\*0.005/0.99 | 1.4, ±1.4;v.large0.08/0.91 | 0.5, ±0.6;mod0.15/0.81 | 3.6, ±1.7;e.large\*\*\*0.02/0.98 |
| Peak force | 1.6, ±0.6;v.large\*\*\*0.01/0.99 | 0.9, ±0.5;large\*\*\*0.03/0.96 | 1.3, ±1.6;v.large0.18/0.82 | 2.4, ±1.1;e.large\*\*\*0.02/0.98 |
| Rate of force development | 0.9, ±0.3;large\*\*\*0.004/0.99 | 0.5, ±0.3;mod0.03/0.94 | 0.5, ±0.6;mod0.16/0.80 | 0.8, ±0.4;large\*\*\*0.02/0.97 |
| Time to peak force from the catch | 0.6, ±0.3; mod\*\*\*0.02/0.97 | 0.3, ±0.3; small\*\*0.03/0.86 | 0.5, ±0.6; mod0.11/0.85 | 1.1, ±0.5; large\*\*\*0.02/0.97 |
| Mean to peak force ratio | 0.6, ±0.2; mod\*\*\*0.009/0.98 | 0.4, ±0.2; small\*\*\*0.02/0.96 | 0.2, ±0.3; small0.09/0.67 | 0.8, ±0.4; large\*\*\*0.03/0.97 |
| Peak force angle | 0.5, ±0.2; mod\*\*\*0.07/0.98 | 0.4, ±0.2; small\*\*0.03/0.92 | 0.3, ±0.4; small0.15/0.75 | 0.4, ±0.4; small0.07/0.87 |
| **Oar angle variables** |
| Catch slip | 0.7, ±0.3;mod\*\*\*0.007/0.99 | 0.5, ±0.2;mod\*\*\*0.02/0.97 | 0.4, ±0.5;small0.14/0.79 | 0.1, ±0.3;trivial0.22/0.39 |
| Finish slip | 0.6, ±0.3;mod\*\*\*0.01/0.97 | 0.3, ±0.3;small0.09/0.78 | 0.4, ±0.5;small0.17/0.76 | —a  |
| Finish angle | 0.5, ±0.2; mod\*\*0.02/0.95 | 0.7, ±0.3; mod\*\*\*0.02/0.98 | 0.7, ±0.5; mod\*\*0.05/0.94 | 1.4, ±1.6; v.large0.13/0.87 |
| Arc angle | 0.9, ±0.4;large\*\*\*0.007/0.99 | 0.6, ±0.3;mod\*\*\*0.02/0.97 | 0.4, ±0.75;small0.19/0.74 | 1.4, ±1.6;v.large0.13/0.86 |
| Catch angle | 1.2, ±0.4; large\*\*\*0.008/0.99 | 0.8, ±0.4; large\*\*\*0.02/0.97 | 0.6, ±1.2; mod0.31/0.67 | 0.9, ±0.5; large\*\*0.04/0.95 |
| M1x, men’s single scull; W1x, women’s single scull; M2-, men’s coxless pairs; W2- women’s coxless pairs.Number of crews: 10, 8, 3 and 6 respectively.Number of races: 17, 13, 5, 12 respectively.a Indicates insufficient data for model to converge adequately.Scale of magnitudes: <0.15%, trivial; 0.15-0.45%, small; 0.45-0.8%, moderate (mod); 0.8-1.26%, large; 1.26-2.02%, very large (v.large); >2.02%, extremely large (e.large). Reference-Bayesian likelihoods of substantial change: \*possibly; \*\*likely; \*\*\*very likely, \*\*\*\*most likely. \*\*\* and \*\*\*\* indicate rejection of the non-superiority or non-inferiority hypothesis (pN- or pN+ <0.05 and <0.005 respectively).Likelihoods are not shown for effects with inadequate precision at the 90% level (failure to reject any hypotheses: p>0.05). Effects in **bold** have adequate precision at the 99% level (p<0.005). |