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Pacing patterns in the last decade of World Rowing Champs and Olympic Games

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INTRODUCTION:

Pacing strategies in rowing are the varied strategies which rowers use to distribute their energy and efforts throughout 2000 meters. The Olympic distance lasting between 5'30"-7'30" (Boillet, 2022). Rowing competitions are 6-line elimination races with boats navigating backwards so an early lead allows the leader to monitor the progress of opponents (Astridge 2022). Given this particularity the most common rowing pacing patterns is parabolic (Muehlbauer, 2011) described as reversed Jshaped (Mentzoni, 2021). Taking this into consideration we examine the last decade of rowing to identify the common pacing and tactics as an important info for coaches and rowers.

METHODS:

Rowing times of each 500m sector of the 6 Finalist boats (1-6th) of each modality were registered from World Rowing Championships (WR) (2010-2022) and Olympic Games (2012-2020).

RESULTS:

Mean rowing times at finals for single sculls were (men (M): 1:40,16; 1:43,84; 1:44,15; 1:42,32 & women (W) 1:51,24; 1:54,58, 1:55,30, 1:55,04) for doubles scull (M: 1:32,7; 1:35,6; 1:35,9; 1:34,1 & W 1:42,4; 1:45,5; 1:45,8; 1:44,5), lightweight double scull (M: 1:35,4; 1:38,1; 1:39,0; 1:37,2 & W: 1:45,8; 1:49,0; 1:48,6; 1:46,5), pairs (M: 1:35,9; 1:39,8; 1:40,0; 1:38,9 & W: 1:45,9; 1:49,8; 1:49,7; 1:48,3) fours (M: 1:29,0, 1:31,9, 1:32,6, 1:30,4 & W: 1:37,1, 1:41,2, 1:42,1, 1:39,3) quads (M 1:26,4, 1:28,6, 1:29,1, 1:27,4 W 1:36,1, 1:39,3, 1:39,7, 1:38,0) & eights (M 1:21,4, 1:24,0, 1:24,6, 1:22,4 W 1:30,2 1:32,8, 1:33,4, 1:31,7).

CONCLUSION:

Results shown that the most common pacing strategy for each modality at the WR & Olympic Finals was the J-shaped as mentioned before, being the first 500m of the race the fastest one, and the last 500m the second. Central sectors (2n and 3rd 500m) showed similar times having the ability to maintain this speed during the whole race will produce a more even rowing times as happened in Tokyo 2021 (Kleshnev, 2021).

Topic: Statistics and Analyses

Presentation E-poster

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