

研究業績 英文表記

和文	
表題	背泳ぎスタートにおける跳び出し時の股関節と膝関節の伸展タイミングの違いはパフォーマンスに影響するか？
著者名	奈良梨央 ¹⁾ 、池田祐介 ¹⁾ 、下門洋文 ¹⁾ 、佐藤大輔 ¹⁾ 、市川浩 ¹⁾ 、馬場康博 ¹⁾ 、下山好充 ¹⁾ 。
所属	1)新潟医療福祉大学
英文	
Title	Does different timing of hip and knee joint extension during take-off affect backstroke start performance?
Author	Nara R ¹⁾ , Ikeda Y ¹⁾ , Shimojo H ¹⁾ , Sato D ¹⁾ , Ichikawa H ¹⁾ , Baba Y ¹⁾ , Shimoyama Y ¹⁾ .
Affiliation	1) Niigata University of Health and Welfare
Abstract	<p>This study investigated how the difference in the timing of the extension of the joints of the lower limbs during take-off affects the backstroke start performance. Eleven backstroke swimmers performed three lower-limb joint extension sequences of backstroke start: knee extension after hip extension (KAH), simultaneous hip and knee extension (SHK), and knee extension before hip extension (KBH). The shortest 5-m time was performed at KAH (1.90 ± 0.26 s), followed by a performance at SHK (2.12 ± 0.52 s) and KBH (2.47 ± 0.61 s). The greater trochanter (GT) vertical positions at toe-off were higher at KAH and SHK than at KBH. KAH had a shorter entry range, defined as the horizontal distance from the fingertip (FT) to the GT entry in the water, than KBH and SHK. A positive correlation was noted between the entry range and the 5-m time at KAH ($r = 0.79$). In addition, a negative correlation was observed between the GT vertical position at toe-off and the entry range at KAH ($r = -0.65$). The results suggested that KAH makes it easier to take the arched-back posture after toe-off, allowing the performance of a hole-entry technique that reduces the entry range and the 5-m time.</p>
keyword	Biomechanics; joints extension sequence; competitive swimming; starting technique.

※本データの英文表記は実際の論文上の表記とは異なります。