

## عنوان مقاله:

The Investigation of Relationship between Anthropometrical and Physiological Parameters of Elite Young Boys in Breaststroke and Butterfly Swimming

## محل انتشار:

مجله بین المللی کودکان, دوره 9, شماره 1 (سال: 1400)

تعداد صفحات اصل مقاله: 13

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## خلاصه مقاله:

Background: The relationship between anthropometrical and physiological parameters of elite young boys in breaststroke and butterfly swimming is essential. We aimed to investigate the relationship between anthropometrical and physiological characteristics with breaststroke and butterfly swimming time in elite swimmer boys. Materials and Methods: This study was a descriptive research, comprised of ۱۲۲ elite young boy swimmers (age ۱۲-۱۳ years; height  $1.54 \pm 0.24$  m; weight  $47.82 \pm 6.84$  kg), who participated in the national championship of the country's selection in ۲۰۱۸ in Shiraz, Iran, and who had signed the consent form. Anthropometrical and physiological parameters were measured for ۵ days. Pearson correlation coefficient was used to examine the relationships between variables. Results: There were significant negative relationships between supraspinatus fat ( $r = -0.461$ ,  $P = 0.009$ ), right leg strength ( $r = -0.376$ ,  $P = 0.037$ ), and static balance ( $r = -0.629$ ,  $P = 0.0001$ ) with ۵۰ m breaststroke time, between leg power (jump length) ( $r = 0.448$ ,  $P = 0.015$ ), and static balance ( $r = -0.529$ ,  $P = 0.003$ ) with ۱۰۰ m breaststroke time, between head circumference ( $r = -0.472$ ,  $P = 0.023$ ), and leg power (jump length) ( $r = -0.454$ ,  $P = 0.030$ ) with ۲۰۰ m breaststroke time, between subscapularis fat ( $r = -0.434$ ,  $P = 0.012$ ), and trunk flexibility ( $r = -0.350$ ,  $P = 0.046$ ) with ۵۰ m butterfly time, between trunk flexibility ( $r = -0.445$ ,  $P = 0.029$ ), and ۱۰۰ m butterfly time. Whereas, there were significant positive relationships between leg action and reaction velocity ( $r = 0.411$ ,  $P = 0.013$ ) with ۵۰ m breaststroke time, between dynamic balance (Internal) ( $r = 0.368$ ,  $P = 0.050$ ), and ۱۰۰ m breaststroke time, between leg power (jump length) ( $r = 0.511$ ,  $P = 0.002$ ), and ۵۰ m butterfly time, between triceps fat ( $r = 0.489$ ,  $P = 0.015$ ), and subscapularis fat ( $r = 0.561$ ,  $P = 0.004$ ), and dynamic balance (lateral) ( $r = 0.424$ ,  $P = 0.039$ ) with ۱۰۰ m butterfly time. Conclusion: There was a significant relationship between anthropometrical and physiological characteristics with elite young boys in breaststroke and butterfly time.

## کلمات کلیدی:

Anthropometrics, Talent identification, Physical fitness Parameters, Students, Swimmers

## لینک ثابت مقاله در پایگاه سیویلیکا:

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