

Sexual Dimorphism in Physical Fitness Parameters of Competitive Adolescent Taekwondo Athletes

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ABSTRACT The aim of this study was to determine gender-related differences in physical fitness parameters of adolescent competitive taekwondo athletes. Subjects were members of the National Taekwondo Team of Turkey (23 men and 19 women). Men taekwondo athletes' MaxVO₂ level was greater than women (54.13±3.47 versus 43.58±5.37 ml.min⁻¹kg⁻¹). Men taekwondo athletes' anaerobic power performance was greater than women (101.90±15.73 versus 73.69±12.13 kg.m/sec). Men have a better 30-meter sprint time than women (4.31±0.18 versus 4.98±0.21sec). Also, men jumped higher than women (37.17±3.43 versus 26.74±3.39 cm). The medicine ball throw distance was higher for men than women (8.51 ± 1.79 versus 6.11 ± 1.09 m). Men had a greater handgrip force than women in both hands (right and left: 45.35±9.03 kg and 32.27±5.99 kg in men; right and left: 43.08±10.44 kg and 30.24±5.64 kg, in women). In conclusion, sexual dimorphism in aerobic, anaerobic power, vertical jump performance, 30-meter sprint and muscle strength performance except for body mass index was found in adolescent competitive taekwondo athletes.