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Characteristics of Handgrip (Kumi-Kata) Profile of Georgian Elite Judo Athletes

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Abstract : Objective: The aim of this study was to investigate the characteristics of Kumi-kata in elite judokas and characterize the kinematic and temporal parameters of different types of handgrip (HG). Method: fourteen participated in this study male athlete (23.5±2.61 years; 1.81±0.37 0 m; 87.25±22.75 kg), members of the Georgian Judo team. To characterize the dominance and types of kumi-kata used, videos of international competitions from each athlete were analyzed, and to characterize kinematic and temporal parameters and handgrip, and the volunteers pressed a digital dynamometer with each hand for 30 seconds(s) after a visual signal. Results: The values of 0.26±0.69s and 0.31±0.03s for reaction time were obtained, respectively, in the full grip and pinch grip; 19.62±18.83N/cm/s and 6.17±3.48N/cm/s for the rate of force development; 475,21 ± 101,322N and 494,65±112,73 for the FDR; 1,37 ± 0,521s and 1,45 ± 0,824s for the time between the force onset to the TFP; and 41,27±4,54N/cm/s and 45,16 ± 5,64N/cm/s for the fall index, in the dominant hand. There was no significant difference between hands for any variable, except for the dominance of Kumi-kata ($p<0.05$) used in combat. Conclusion: The dominance of application of the Kumi-kata is a technical option, as it does not depend on the kinetic-temporal parameters of the handgrip.

Keywords : hand grip, judo, athletes, Kumi-Kata
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