ABSTRAK

Daya ledak otot tungkai sangat penting untuk mengoptimalkan komponen kebugaran jasmani yang berhubungan dengan tendangan. Daya ledak otot tungkai dapat ditingkatkan dengan latihan *plyometric*, salah satunya adalah latihan *hurdle hops*. Penelitian ini bertujuan menganalisis efektivitas latihan *hurdle hops* terhadap peningkatan daya ledak otot tungkai pada anggota Dojang Taekwondo Gamarga. Desain penelitian menggunakan *quasi-experimental* dengan pendekatan *nonequivalent control group design* melalui *purposive sampling* terhadap 16 atlet laki-laki berusia 12-15 tahun yang terbagi dalam kelompok eksperimen (*hurdle hops*) dan kontrol (latihan standar rutin). Intervensi dilakukan sebanyak 12 kali pertemuan selama 4 minggu dengan pengukuran *vertical jump test*. Hasil penelitian menunjukkan kelompok eksperimen mengalami peningkatan 16,44% (nilai *mean* 46,375 cm menjadi 54,000 cm) sedangkan kelompok kontrol 5,95% (nilai *mean* 44,125 cm menjadi 46,750 cm). Analisis *Independent Samples T-Test* menunjukkan perbedaan signifikan antara kelompok eksperimen dan kontrol dengan nilai signifikansi $p<0,001$ ($p < 0,05$), *Paired Samples T-Test* mengonfirmasi peningkatan dalam kelompok eksperimen dengan nilai signifikansi $p<0,001$ ($p < 0,05$), dan ANCOVA membuktikan efektivitas latihan *hurdle hops* setelah mengontrol kovariat dengan nilai signifikansi $p=0,034$ ($p < 0,05$). Kesimpulan penelitian menyatakan bahwa latihan *hurdle hops* secara signifikan lebih efektif dibandingkan latihan standar rutin dalam meningkatkan daya ledak otot tungkai pada atlet taekwondo.

Kata Kunci: Daya Ledak Otot Tungkai, Latihan *Hurdle Hops*, *Vertical Jump Test*

ABSTRACT

Leg muscle bursting power is very important to optimize physical fitness components related to kicking. Leg muscle bursting power can be improved with plyometric exercises, one of which is hurdle hops training. This study aims to analyze the effectiveness of hurdle hops training on increasing leg muscle bursting power in members of Dojang Taekwondo Gamarga. The research design used a quasi-experimental with a non-equivalent control group design approach through purposive sampling of 16 male athletes aged 12-15 years who were divided into experimental (hurdle hops) and control (routine standard training) groups. The intervention was carried out 12 times a meeting for 4 weeks with the measurement of the vertical jump test. The results indicated that the experimental group experienced an increase of 16.44% (mean value 46.375 cm to 54.000 cm), while the control group was 5.95% (mean value 44.125 cm to 46.750 cm). Independent Samples T-Test analysis showed a significant difference between the experimental and control groups with a significance value of $p<0.001$ ($p < 0.05$), Paired Samples T-Test confirmed the improvement in the experimental group with a significance value of $p<0.001$ ($p < 0.05$), and ANCOVA proved the effectiveness of hurdle hops exercise after controlling for covariates with a significance value of $p=0.034$ ($p < 0.05$). The conclusion of the study states that hurdle hops training is significantly more effective than standard routine training in increasing leg muscle bursting power in taekwondo athletes.

Keywords: Leg Muscle Bursting Power, Hurdle Hops Training, Vertical Jump Test.