The Effectiveness of Strength Training Program on Young Novices' School Hurdle Runners in Sri Lanka

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Despite an extensive repository of studies on strength training, the limited substance has been discovered regarding the way strength training affects young Sri Lankan school hurdle runners' performance. Hence, the objective of this study was to investigate the effect of strength training on young novices' school hurdle runners in Dhabulla division, Sri Lanka. Young male and female school athletes (30) were randomly selected and divided into two groups: control (C Group: n = 15) and treatment (T group n = 15) unsystematically. The athletes in the T group were training special strength training 3 times per week for 12 weeks and the C group continued with their normal training sessions. The Maximum strength (1 RM), explosive (Standing long jump), total fat % and leg muscle circumference measurements were recorded prior to and at the end of the training program. Paired sample t-test revealed a significant improvement in maximum, explosive strength and leg muscle circumferences record ($p>0.000$) in the athletes from the T group. As a result, it was observed strength training program for hurdle runners increased their maximum, explosive and muscle circumferences except total fat percentage. Hence, it reveals that strength training was enhancing muscle hypertrophy and motor unit recruitment but unfortunately, it was not much enough to decrease the total fat percentage from young hurdle runners in the Dhabulla division.

Keywords: Explosive Strength, Leg Muscle Circumference, Maximum Strength, Fat Percentage