

Effect of strength training on selected physical fitness and anthropometric variables of school's kabaddi players

Jayasingha R. T¹., Jayasekara D. C¹. and Joniton S.^{2*}.

¹National Institute of Sport Science, Sri Lanka.

²Department of Sport Sciences and Physical Education, Faculty of Applied Sciences, Sabaragamuwa University of Sri Lanka.

Rasindu.thisanka@gmail.com

Kabaddi is a vigorous sport that is done entirely on the basis of body strength, techniques and it requires high physical fitness. The present study was to find out the effect of strength training on selected physical fitness and anthropometrical variables of kabaddi players. Thirty male school kabaddi players with age ranging from 17-20 years were randomly selected from Sabaragamuwa province in Sri Lanka. The subjects were randomly divided into an experimental group (n=15) and a control group (n=15). The selected physical fitness parameters (agility, explosive strength, strength endurance and maximum strength) and anthropometric parameters (thigh, arm and chest circumferences) were carried out before (pre-test) and after the twelve weeks training period (post-test). The experimental group underwent specific strength training sessions for three (03) days in a week for a total twelve (12) weeks. The control group did not participate in any specific training as the experimental group. Paired t-test was used to determine the mean differences of the physical fitness and anthropometric parameters in pre and post-test. where the significant variables were selected based on p-value (<0.05). The results showed a significant difference between the improvement in the experimental group after strength training when compared to pretest. Therefore, strength training has a positive effect on enhancing the agility, explosive strength, strength endurance, maximum strength and body circumferences namely, thigh, arm, and chest. The findings suggest the potential of using strength training to improve agility, explosive strength, strength endurance and maximum strength, and thigh, arm, and chest circumferences particularly in male school kabaddi players.

Keywords: *Kabaddi, Strength, Anthropometric, Physical fitness*