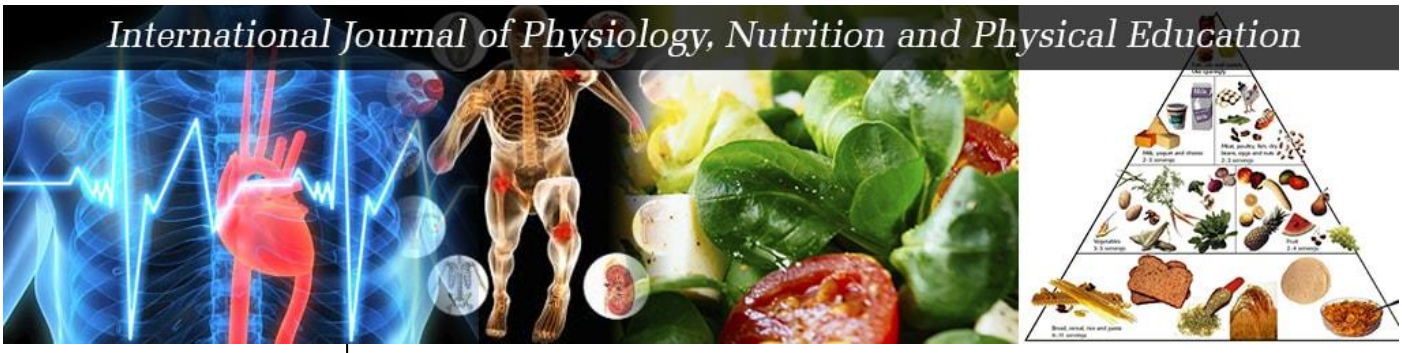

ISSN: 2456-0057
IJPNPE 2019; 4(1): 1231-1232

www.journalofsports.com
Received: 04-11-2018
Accepted: 06-12-2018

M Manikandan
Ph.D Research Scholar, Ramakrishna Mission Vivekananda Educational and Research Institute, Faculty of General & Adapted Physical Education and Yoga, Tamil Nadu, India

Dr. S Sivasankar
Director of Physical Education, Sri Ramakrishna Mission College of Education, Coimbatore, Tamil Nadu, India

Correspondence
M Manikandan
Ph.D Research Scholar, Ramakrishna Mission Vivekananda Educational and Research Institute, Faculty of General & Adapted Physical Education and Yoga, Tamil Nadu, India

Effect of sand training on muscular strength of Inter collegiate large area game players

M Manikandan and Dr. S Sivasankar

Abstract
To achieve the purpose of the present study was to find out the effect of sand training on selected muscular strength of large area games inter collegiate players. For this purpose, sixty large area games of inter collegiate players were selected from Coimbatore Institute of Technology, Coimbatore Tamil Nadu India were selected as subjects at random. The age of the subjects ranged from 18 to 25 years. They were assigned to two groups namely experimental group-I (n=30) sand training and group-II (n=30)acted as control group. The experimental group for 12 weeks 3 days a week for 90 minutes duration. The selected criterion variable muscular strength assessed with sit ups. After twelve weeks sand training practice post test data were collected and treated with dependent 't'test. The level of confidence was fixed at 0.05. The study results showed that the experimental group-I had significantly improved on muscular strength due to the effect of sand training group compared with and control group. The control group did not improve the muscular strength of intercollegiate large area game players.

Keywords: Sand training and muscular strength

Introduction
Training demands correct understanding and realization of the sports man's strength, capacity and weakness. Training improves the function of the circulatory respiratory and muscular system, while practice is largely aimed at improving, the control of muscular activity by the nervous system. Different training methods have been commonly used to improve physical fitness and its related standards of performance of the players. Sport training is a basic preparation of sportsman for better performance through physical exercise. It is based on scientific principles of aiming at education and performance enhancement. Sand is a great training tool for improving speed and agility. It provides resistance that challenges your muscles, helping to make you faster and more explosive. Jim Wnek found that Sand is a great training tool for improving speed and agility. It provides resistance that challenges your muscles, helping to make you faster and more explosive. The constant shifting under your feet engages small stabilizer muscles that improve balance and reduce the risk of injury. Plus, sand training gives you an excuse to work out in the great outdoors. Running in the sand offers maximum conditioning and strengthening of the lower legs. As the sand moves and shifts beneath their weight, their ankles and calves are activated and working very hard. Sand running also helps to improve an athlete's coordination and balance and this is great for agility training. Physical fitness is one of the most important factors that determine the performance level of an individual. Sports performance depends largely on physical fitness factors such as strength, speed, endurance, flexibility and various abilities requiring co – ordination. The purpose of the study was to find out effect of sand training on selected physical fitness variables of intercollegiate large area players.

Methodology
To achieve the purpose of the present study was to find out the effect of sand training on selected muscular strength of large area games inter collegiate players. For this purpose, sixty large area games of inter collegiate players were selected from Coimbatore Institute of Technology, Coimbatore Tamil Nadu India were selected as subjects at random. The age of the subjects ranged from 18 to 25 years.

They were assigned to two groups namely experimental group-I (n=30) sand training and group-II (n=30) acted as control group. The experimental group for 12 weeks 3 days a week for 90 minutes duration. The selected criterion variable muscular strength assessed with sit ups. After twelve weeks sand training practice post test data were collected and treated with dependent 't' test. The level of confidence was fixed at 0.05. The level of confidence was fixed at 0.05.

Training Program

Week	Training	1 & 2	3 & 4	5 & 6	7 & 8	9 & 10	11 & 12
% of Intensity	Sand Training Exercises	50	55	60	65	70	75

Load: Max HR 220 Formula followed

Table 1: Pre-test and post test mean value of sand training group and control group of muscular strength

Group	Test	Mean	S.D	D.M	□DM	't' Value
Sand Training Group	Pre-Test	26.16	6.25	8.77	0.73	12.07*
	Post-Test	34.93	5.31			
Control Group	Pre-Test	26.70	4.82	1.20	0.61	1.87
	Post-Test	25.50	4.98			

*Significant Level of significant was fixed at 0.05 with df 29 Table value 2.04

Table-I shows that the pre and post mean values of experimental and control group of muscular strength. The obtained 't' value of 12.07 experimental training group-1 is greater than table the value of 2.04 with df 29. The control group of obtained 't' value of 1.87 which is lesser than table value 2.04 with df 29. is insignificant.

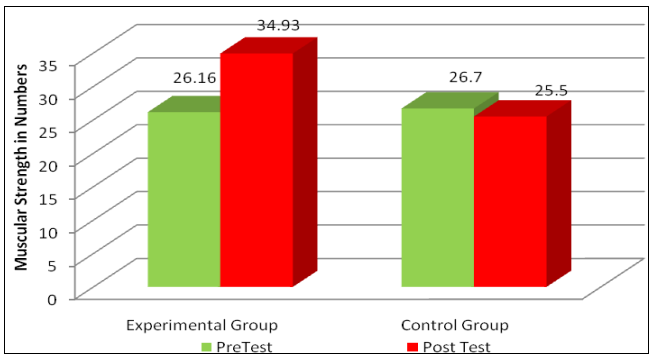

Fig 1: The mean values of muscular strength of sand training group and control group

Discussion on Findings

Based on results of the study it is statistically proved that significant improvement of muscular strength of inter collegiate large area game players. The results are in conformity with other studies;

The results of the study are in conformity with the findings of Priyanka and Bhargab Borah (2016) [1] Martyn *et al* (2014) [4], Binnie (2014) [2], Karver, Alicia Anne (2013) [3]. Sivamani and Sultana, D. (2014) [5].

Conclusions

The sand training group improved on muscular strength compared with control group on inter collegiate large area game players. The control group did not improve muscular strength.

References

1. Priyanka, Bhargab Borah. Effect of eight weeks sand training on motor fitness components and performance in long jump for boys aged 14 to 16 years. International Journal of Multidisciplinary Research and Modern Education. 2016; 2(2):148-150.
2. Binnie MJ, Dawson B, Pinnington H, Landers G, Peeling P. Sand training: a review of current research and practical applications. J Sports Sci. 2014; 32(1):8-15.
3. Karver, Alicia Anne. Sand jump training versus ground jump training for volleyball players. Sacramento State Electronic Theses/Projects and Dissertations, 2013.
4. Martyn BN, Brian D, Hugh P. Grant landers & peter peeling Sand training: a review of current research and practical applications. Journal of Sports Sciences. 2014; 32(1):8-15.
5. Sivamani, Sultana D. Effect of Sand Training with and without Plyometric Exercises on Selected Physical Fitness Variables among Pondicherry University Athletes. Indian Journal of Science and Technology. 2014; 7(S7):24-27.