



International Journal of Physical Education, Sports and Health

P-ISSN: 2394-1685
E-ISSN: 2394-1693
Impact Factor (RJIF): 5.38
IJPESH 2022; 9(5): 22-24
© 2022 IJPESH
www.kheljournal.com
Received: 08-07-2022
Accepted: 19-08-2022

S Senthil Kumar
Ph.D., Research Scholar,
Department of Physical
Education, Kongunadu College
of Arts and Science, Coimbatore,
Tamil Nadu, India

Dr. PK Kavithashri
Director of Physical Education,
Department of Physical
Education, Kongunadu College
of Arts and Science, Coimbatore,
Tamil Nadu, India

Corresponding Author:
S Senthil Kumar
Ph.D., Research Scholar,
Department of Physical
Education, Kongunadu College
of Arts and Science, Coimbatore,
Tamil Nadu, India

Effect of traditional training on physical fitness variables of volleyball players

S Senthil Kumar and Dr. PK Kavithashri

Abstract

This study was investigated the impact of traditional training on physical fitness variables of volleyball players. To achieve the purpose of the study 40 male volleyball players were selected from Coimbatore district. The subjects was randomly assigned to two equal groups (n=20). Group- I underwent traditional training (TST) and group - II was acted as control group (CG). The traditional training was given to the experimental group for 3 days per week (Monday, Wednesday and Friday) for the period of twelve weeks. The control group was not given any sort of training except their routine work. The physical parameters of leg explosive power (standing broad jump test) muscular strength endurance (sit-ups) before and after training period. The data collected from the subjects was statistically analysed with 't' test to find out significant improvement if any at 0.05 level of confidence. The result of the present traditional training significantly improved leg explosive power and muscular strength endurance and of rural volleyball players.

Keywords: Traditional training, leg explosive power, muscular strength endurance and volleyball players

Introduction

The great thought of physical education is not the education of the physical nature, but the relation of physical training to complete education, and then the effort to make the physical contribute its full share to the life of the individual". Training is series of physical activities executed for the purpose of increasing efficiently in running and it should be continued throughout an athlete's life time. The specific physical fitness that permits a faster time acquired most efficiently through scientifically tailored schedule to the length and anticipated speed of the racing distance. The complete rules are extensive. But simply, play proceeds as follows: a player on one of the teams begins a 'rally' by serving the ball (tossing or releasing it and then hitting it with a hand or arm), from behind the back boundary line of the court, over the net, and into the receiving team's court. The receiving team must not let the ball be grounded within their court. The team may touch the ball up to 3 times but individual players may not touch the ball twice consecutively. Typically, the first two touches are used to set up for an attack, an attempt to direct the ball back over the net in such a way that the serving team is unable to prevent it from being grounded in their court. The rally continues, with each team allowed as many as three consecutive touches, until either (1) a team makes a kill, grounding the ball on the opponent's court and winning the rally; or (2) a team commits a fault and loses the rally. The team that wins the rally is awarded a point, and serves the ball to start the next rally. After an observer, Alfred Halstead, noticed the volleying nature of the game at its first exhibition match in 1896, played at the International YMCA Training School (now called Springfield College), the game quickly became known as volleyball (it was originally spelled as two words: "volleyball"). Volleyball rules were slightly modified by the International YMCA Training School and the game spread around the country to various YMCAs.

Traditional Training

Traditional training is a specialized process of the physical perfection of the content of which is the planned preparation foretop class performance in the event or discipline chosen on the basis of evaluation and training. For improving the standard of play in the field of sports, conditioning exercise play a prominent role.

Exercise builds confidence, physical and mental abilities. Cultivates power of will and determination and promotes personal efficiency and a number of position mental characteristics. According to "Fitness" magazine. In this type of traditional training move such as squats is immediately followed by a cardio move such as sprinting the length of a volleyball court, followed by another strength move such as push-ups. This training can be a total body workout, by including a strength move for each of the major muscle groups.

Methodology

In this study the selected 40 male volleyball players selected from Coimbatore district. The subjects were randomly assigned in to two equal groups namely, traditional training (TTG) (n=20) and Control group (CG) (n=20). The respective training was given to the experimental group the 3 days per weeks (alternate days) for the training period of twelve weeks. The control group was not given any sort of training except their routine. The evaluated physical parameters were leg explosive power was assessed by standing broad jump test

and the unit of measurement was in metres, muscular strength endurance was assessed by sit-ups the unit of measurements was in counts.

Training Programme

The training programme was lasted for 60 minutes for session in a day, 3 days in a week for a period of 12 weeks duration. These 60minutes included 10 minutes warm up, 40 minutes for traditional training and 10 minutes and warm down. The equivalent in mobile surface strength training is the length of the time each action in total 3 day per weeks (Monday, Wednesday and Friday).

Statistical Analysis

The collected data before and after training period of 12 weeks on the above said variables due to the effect of traditional training was statistically analyzed with 't' test to find out the significant improvement between pre and posttest. In all cases the criterion for statistical significance was set at 0.05 level of confidence. ($p < 0.05$)

Table 1: Computation of 't' ratio on selected physical parameters on experimental group and control group (Scores in numbers)

Group	Variables	Mean	N	Std. Deviation Pre	Std. Deviation Post	T ratio	
Experimental Group	Leg explosive power	Pre test	1.46	20	0.23	0.19	3.15*
		Post test	1.62	20			
	Muscular strength	Pre test	23.73	20	1.27	1.18	12.58*
		Post test	26.53	20			
Control group	Leg explosive power	Pre test	1.46	20	0.23	0.26	1.14
		Post test	1.47	20			
	Muscular strength	Pre test	23.73	20	1.27	1.29	1.00
		Post test	23.66	20			

*significant level 0.05 level degree of freedom (2.09, 1 and 19)

Table 1 reveals the computation of mean, standard deviation and 't' ratio on selected physical parameters namely leg explosive power and muscular strength experimental group. The obtained 't' ratio on leg explosive power and muscular strength were 3.15 and 12.58 respectively. The required table value was 2.09 for the degrees of freedom 1 and 19 at the 0.05 level of significance. Since the obtained 't' values were greater than the table value it was found to be statistically significant.

Further the computation of mean, standard deviation and 't' ratio on selected physical parameters namely leg explosive power and muscular strength control group. The obtained 't' ratio on leg explosive power and muscular strength were 1.14 and 1.00 respectively. The required table value was 2.14 for the degrees of freedom 1 and 19 at the 0.05 level of significance. Since the obtained 't' values were lesser than the table value it was found to be statistically not significant.

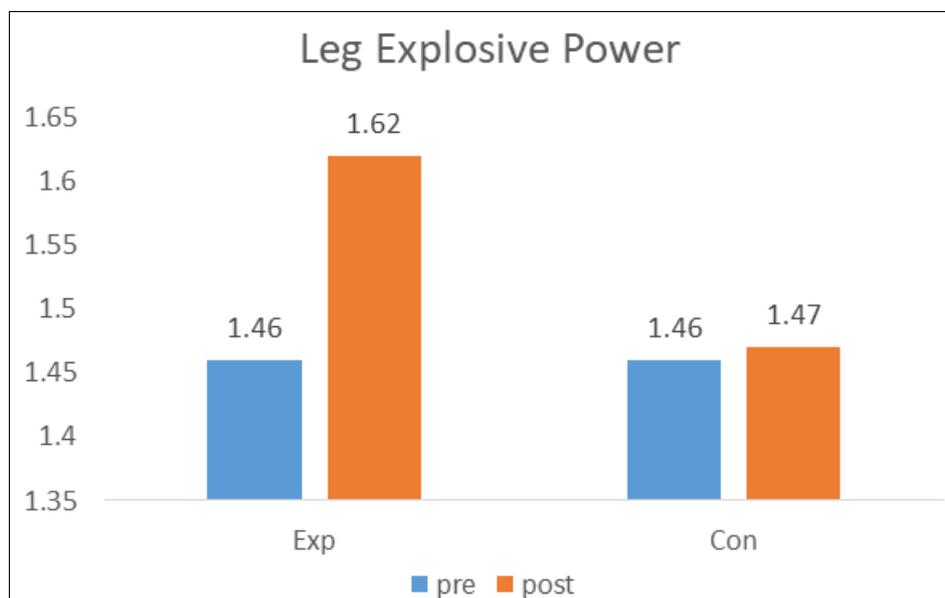


Fig 1: Bar diagram showing the mean value on Leg explosive power of volleyball players on Experimental and Control group (Scores in numbers)

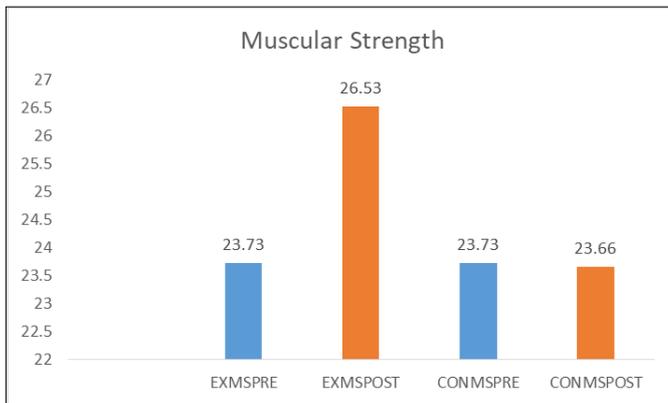


Fig 2: Bar diagram showing the mean value on muscular strength of volleyball players on Experimental and Control group (Scores in numbers)

Discussion and Findings

The present study experimented the effect of traditional training on physical parameters of male volleyball players. The result of the study shows that the traditional training improved the leg explosive power and muscular strength endurance. The findings of the present study had similarity with the findings of the investigations referred in this study. However, there was a significantly changes of subjects in the present study the leg explosive power and muscular strength endurance was significantly improved of subject in the group may be due to the in traditional training. Sheppard, *et al.*, (2012) ^[4] assisted jumping on vertical jump height in high-performance significantly improvement of volleyball players. Perrier *et al.*, (2008) ^[3] reported that Athletes in sports requiring lower-extremity power should use stretching techniques in warm-up to enhance explosive power while improving performance.

The result of the present study indicates that the traditional training programme is effective method to improve muscular strength endurance and leg explosive power of volleyball players.

Conclusions

1. It was concluded that 12 weeks of traditional training significantly improved the leg explosive power of male volleyball players.
2. It was concluded that 12 weeks of traditional training significantly improved the muscular strength of male volleyball players.

Reference

1. Bazett, Jones DM. Sprint and vertical jump performances are not affected by six weeks of static hamstring stretching, Department of Exercise and Sports Science. 2007;39(10):1825-31.
2. Carvalho FL, *et al.* acute effects of a warm-up including active, passive, and dynamic stretching on vertical jump performance. Journal of strength and conditioning research. 2011;25(11):2991-8.
3. Perrier *et al.* reported that Athletes in sports requiring lower-extremity power should use stretching techniques in warm-up to enhance flexibility while improving performance; 2008.
4. Sheppard JM, *et al.* The effect of assisted jumping on vertical jump height in high-performance volleyball players. J Strength Cond Res. 2012;26(6):1475-80.
5. Singh Raspall, *et al.*, An evaluation of selected physical fitness variables of kabaddi, Kho-Kho and wrestling

- players from haryana and Punjab. Research Journal of Physical Education Sciences. 2013;1(2):1-4
6. Trajković N, *et al.* The effects of 6 weeks of preseason skill-based conditioning on physical performance in male volleyball players. J Strength Cond Res. Department of Sport and Physical Education, University of Niš, Niš, Serbia. 2011;25(6):1686-94.