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Effect of Alternate High and Low Intensity Training on Physical Fitness Variables among Inter-Collegiate Male Kabaddi Players

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Abstract

The purpose of present study was to find out the effect of Alternate High & Low Intensity Training on selected physical fitness variables among intercollegiate men Kabaddi players of Bangalore University. For this purpose, thirty men Kabaddi players in the age group of 18 - 25 years were selected as subjects. The selected subjects were divided into two equal groups, in which, Group-I: Alternate High & Low Intensity Training Group (BSTG) (n=30) underwent specific training and Group–II: Control Group (CG) (n=30) acted as control which did not participate any training but allowed to take part in their regular Kabaddi training and playing programme. The training programme was carried out for this study was five days per week for twelve weeks. Prior to and after the training period the subjects were tested for speed and explosive power. These were assessed by administering 50 Meters Dash and Standing Broad Jump respectively. The statistical tool used for the present study was 't' test. After applying the 't' test, it was found that there was significant improvement in the selected physical fitness variables such as speed and explosive power for Alternate High & Low Intensity Training Group (BSTG) when compared with control group. Based on the results it was concluded that the Alternate High & Low Intensity Training was significantly improved the physical fitness of Kabaddi players.

Keywords: High and Low Intensity Training, Speed, Explosive Power.

Introduction

Coaches and athletes have always searched for training programs which will result in better performance. This has resulted in the evaluation of weight training as a program leading to improved performance. In some sports, strength is highly important for performance. Acquisition of sports skill is important to enable the sportsman to do the required motor actions during competition without concentrating on the movement execution. According to Hockey (1993), physical fitness is the ability to carry out everyday task with vigor and alertness without undue fatigue and with ample energy to enjoy leisure pursuits and to meet unforeseen emergencies. Regularly indulging in sports helps in keeping the immune system strong and prevents disease. It also increases the appetite of the person. Thus, sports promote good health. Sports inculcate discipline, dedication and responsibility in a person, which he is able to apply in other areas of life as well. This makes him achieve success in every sphere of life, thus, making him even more confident.

In the case of Kabaddi, the basic skills like holding, riding, blocking, and breath holding are highly needed. It is true that these skills are basic abilities for all Kabaddi players, but the performance potential depends on specific variables. The coaches and trainees may not be able to determine them by their subjective observations of performances alone. A scientific analysis of the player's performance with respect to their skills might help in a much more positive way. Physical Fitness is the capacity to carry out reasonably well various forms of physical activities without being unduly tired and includes qualities important to the individuals' health and well being. A close relationship exists between physical fitness and sports performance. In case the standard of games and sports in the country is to be improved, adequate stress have to be given for enhancing the physical fitness status of sports persons. Regular participation on training schedule improves all the important physical, physiological and psychological fitness components.

Intensity refers to the power of rate of doing work is commonly thought of as the pace at which one runs or the explosiveness with which weights are lifted. In endurance events, heart rate is linearly related with physical work capacity and oxygen uptake. Although the human body is designed for movement and strenuous physical activity, exercise is not typically a part of the average life style. One cannot expect the human body to function optimally and to remain healthy for extended

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periods if it is abused, or not used as intended. Thus, physical activity has led to a rise in hypo kinetic diseases.

Objective of the Study

The objective of the study was to determine the effect of Alternate High & Low Intensity Training on selected Physical fitness variables of intercollegiate male Kabaddi players.

Hypothesis of the Study

It is hypothesized that there would be a significant difference in the selected Physical fitness variables among experimental group by practicing high and low intensity training.

Methodology

To achieve the purpose of this study, 60 Inter collegiate male Kabaddi players were selected from Bangalore University, Karnataka, India. They were divided into two equal groups namely Group-I AHLITG (Alternate High & Low Intensity Training Group) and Group-II CG (Control Group). After assigning the subjects in groups, 't'- test was conducted to assess the physical fitness variables speed and explosive power by administering 50 meter dash and standing broad jump and this was considered as a pre-test. After the pre-test, the Group-I (AHLITG) underwent high and low intensity training program for training for 12 weeks, and Group-II (CG) did not engage any training given by the scholar. After the 12 weeks, post-test was conducted for both groups, and score were recorded accordingly. The collected data was evaluated using 't' test analysis. The proposed hypothesis was tested at 0.05 and 0.01 levels of confidence. The Statistical Software for Social Science (SPSS) was used.

Analysis of Data

The data collected prior to and after the experimental periods on selected physical fitness variables such as speed and explosive power of Alternate High & Low Intensity Training Group (AHLITG) and Control Group (CG) were analyzed and presented in the following table-I.

Table I. Table showing 't' test analysis between pre test and post test scores for selected physical fitness variables such as Speed and Explosive for Alternate High & Low Intensity Training Group (AHLITG) and Control Group (CG) (N=30 Each group)

Physical Fitness Variables	Tests	Control Group			Experimental Group		
		Mean	SD	't' Value	Mean	SD	't' Value
Speed (In Secs)	Pre Test	7.42	0.28	1.94^{NS}	7.37	0.36	6.84*
	Post Test	7.39	0.46		7.11	0.33	
Exp Strength (In Meters)	Pre Test	1.67	0.10	1.07^{NS}	1.64	0.27	5.04*
	Post Test	1.69	0.204		1.76	0.16	

^{NS}Not Significant: * Significant at 0.05 level [Table Value = 2.04]

The above table-I shows that the obtained 't' values 1.94 (Speed) and 1.07 (Explosive Strength); for control group which are lesser than the table value 2.04, hence, it was not significant even at 0.05 level of confidence. It is concluded that the changes made from pre-test to post test was statistically not significant among control group. The table-I further shows that that the obtained 't' values 6.84 (Speed) and 5.04 (Explosive Strength) for Alternate High & Low Intensity Training group (AHLITG) which are greater than the table value 2.04, hence, it is significant at 0.05 level of confidence. It is concluded that the AHLITG specific training group was significantly improved the selected physical fitness components of men Kabaddi players. This may be due to AHLITG group subjects participated in alternate high and low intensity training programme.

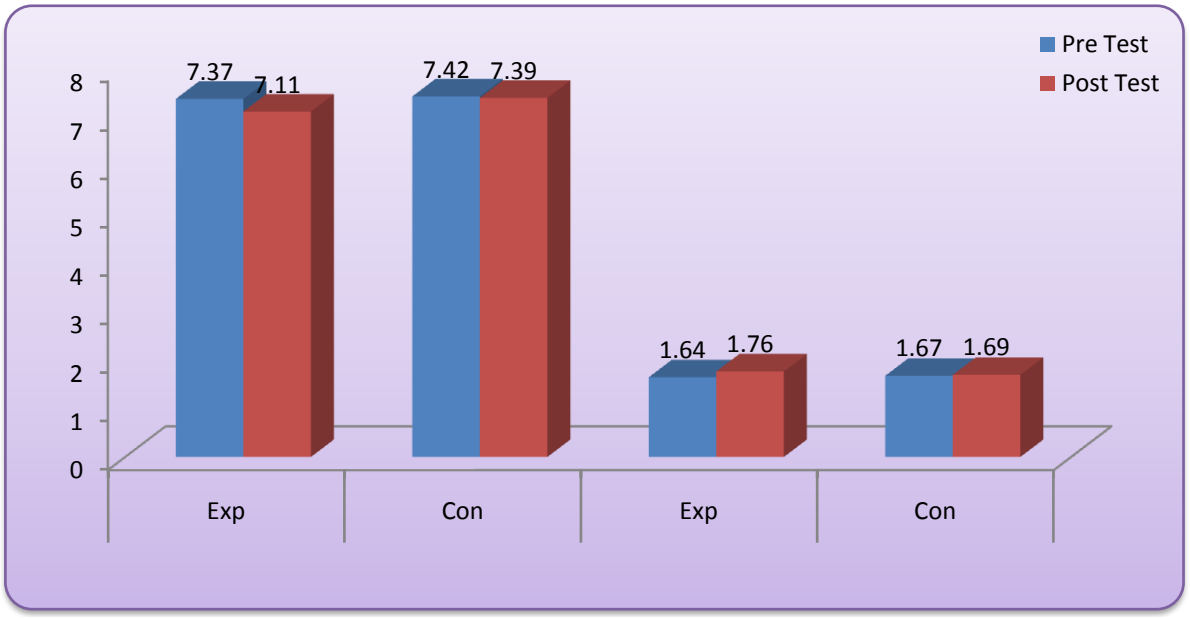

Figure I. Comparison of pre test and post test mean scores of selected physical fitness variables among control and experimental groups

Discussion on Findings

The present study find out the effect of AHLITG programme on selected physical fitness variables of Bangalore University Kabaddi men players after administration of tests for collection of data with appropriate statistical analysis. The researcher has made an attempt to discuss the findings based on the obtained results. The researcher examined the effect of alternate high & low intensity training on selected physical fitness variables of Kabaddi players. The result shows that the 12 weeks specific exercises improved speed and explosive power of kabaddi players. This may be due to subjects participated in a alternate high & low intensity training were to specifically target the requirements of competitive kabaddi players. The similar results supported by Parimalam (2013) and Sandeep Sharma (2015) found that specific exercise programms was improved the physical fitness variables of Basketball Players.

Conclusion

This study confirmed that the alternate high & low intensity training group was significantly improved the selected physical fitness components of men Kabaddi players when compared to the control group.

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