

# Influence of parcourse training on muscular endurance among college boys

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## ABSTRACT

To achieve the purpose of the study thirty (N=30) students studying in the Alagappa Government Arts College ,Alagappapuram ,Karaikudi were selected as subjects at random and. The age of the selected subjects ranged between 19 to 22 years. Experimental group (n=15) was called step parcourse training group. Group-I underwent one hour parcourse training for three sessions per week for eight weeks. The control group did not participate any special training apart from regular activities. The data were collected prior and immediately after the training programme on muscular endurance .The muscular endurance was measured bent knee sit-ups . The collected data of experimental group was statistically analyzed by using mean standard deviation and t-test and present table I. The level of significant was fixed at 0.01 level of confidence. The study was concluded there was significant improvement on muscular endurance due to eight weeks of parcourse training among college boys.

**Key words:** parcourse training and muscular endurance.

## Introduction

The training is a process of preparing an individual for any event or an activity or job. A new concept of circuit training is called parcourse training. It consists of two training such as continuous and circuit training. It develops the aerobic fitness. In this training exercises are selected and arrange consecutively over a 1 to 2 and half mile path. Number of exercises, repetitions, rest, and number of circuit vary based on the needs .During the training subject move one station to another station by jogging. It is one of the most important to achieve the high performance. The objectives of parcourse training are to increase the physiological potential and to develop bio motor abilities to the highest standards.It is an outdoor exercise track or course,especially for joggers equipped with a series of station along the way where one is to stop and perform a specific exercise. Muscular endurance is the ability of the muscle to work continuously without tiring for a long period. It depends on a large exert on muscular strength and to lesser exert on cardio respiratory endurance. Muscular strength and muscular endurance are interrelated but they have a basic difference.

## Reviews

Palanisamy and Dhanarai (2013)., examined Effect of parcourse training on muscular endurance among college men hand ball players .The hand ball players from Alagappa university college of physical education, Karaikudi were selected randomly as subjects. The age of the students were ranged from 18 to 24 years. The selected subjects were divided in to two equval groups. Group - A underwent parcourse training and Group-B acted as control group. The experimental group was subjected to the training for three days in a week for a period of 6nweeks .The dependent variable namely muscular endurance measured by bent knee sit-ups test. The data were collected from each subjects before and after the training period and statistically analysed by using dependent t test and ANCOVA. It was found there was a significant improvement on muscular endurance due to parcourse training effect.

Manikandn.,(2014) conducted effect t of parcourse training on strength and power parameters. The purpose of the current study was to investigate the training effect of 8 weeks of parcourse training on leg strength , muscular strength and explosive power and an aerobic power of 30 un trained male students aged 18 to 22 years took part in the study. Subjects were randomly assigned in to two equal groups. Group –I underwent parcourse training for 8 weeks.. Group –II acted as control group. All the tests were carried out with standardized procedure. The collected date of experimental group pre and post test was statistically analyzed by using ANCOVA test for significance difference. The level of significant was fixed at 0.05 level of confidence. The result of study revealed 8 weeks of parcourse training had an impact of 13.9%on muscular strength,25.57% on explosive power ,18.23 %on cardio respiratory endurance .Theses result suggest that parcourse training had significant influence in improving selected dependent variables.

## METHODOLOGY

To achieve the purpose of the study thirty (N=30)students studying in the Alagappa Government Arts College ,Alagappapuram ,Karaikudi were selected as subjects at random and. The age of the selected subjects ranged between 19 to 22 years. Experimental group (n=15) was called step parcourse training group. Group-I underwent one hour parcourse training for three sessions per week for eight weeks. The control group did not participate any special training apart from regular activities. The parcourse training programme are including warming up and limbering down .parcourse training consists of seven stations(high knee action, push ups, bent knee sit ups, split jump, bicycle crunch ,skipping and hyper extension) were arranged in standard track (400M).Each subjects move from one station to another station by slow jogging. Repetitions vary from 10 to 15.Number of circuits also vary from two to three. 5 minutes recovery between the circuits. However individual differences were taken into account which fixing load. The over load principle was applied. Progressively workload was increased in four weeks once. The data were collected prior and immediately after the training programme on muscular endurance .The muscular endurance was measured bent knee sit- ups (Yobu .,2010). The collected date of experimental group was statistically analyzed by using mean standard deviation and t-test and present table I. The level of significant was fixed at 0.01 level of confidence.

## TABLE-I

**The mean, standard deviation, standard error and t- value of experimental group on muscular endurance**

S.No	Muscular endurance	Mean	SD	SE	t- Value
1.	Pre test	24.07	1.58	0.58	8.62*
2.	Post test	29.07	1.58		

\* Significant at 0.01 level of confidence this table value for the significance of 2.58

Table –I reveals the mean, standard deviation, standard error and t- value of pre and post test scores of experimental group. The t- values of the Muscular Endurance significantly increased and it showed the efficiency of eight weeks of parcourse training. In the selected muscular endurance value was greater than table value of 2.58 and it shown the significant difference in the pre and post tests value were found.

**TABLE-II**

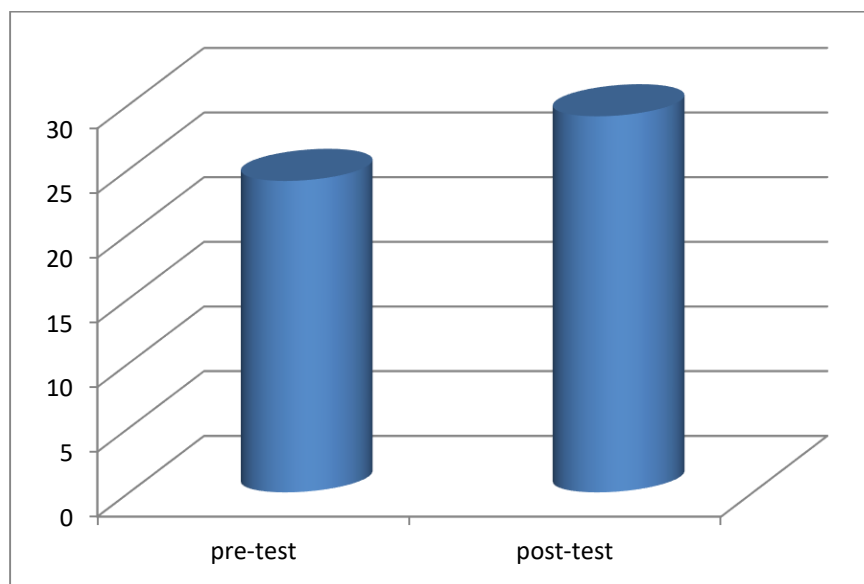
**The mean, standard deviation, standard error and t-value of control group on muscular endurance.**

S.No	Muscular endurance	Mean	SD	SE	t- Value
1.	Pre test	23.6	1.95	0.63	1.70
2.	Post test	24.23	1.51		

\* Significant at 0.01 level of confidence this table for the significance 2.58

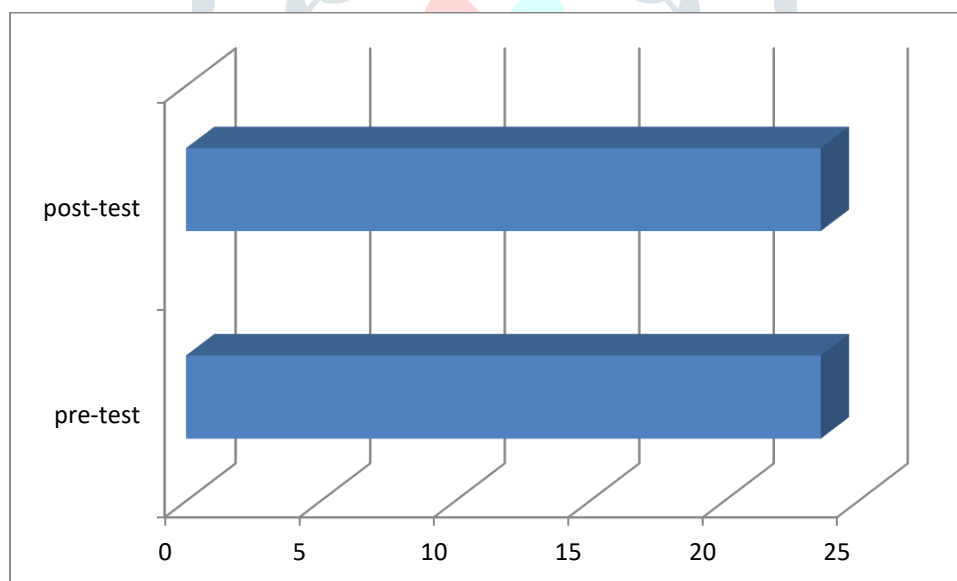
Table-II reveals the mean, standard deviation, standard error and t- value of pre and post test scores of control group on muscular endurance. The t- values of the muscular endurance in significant and it showed no efficiency of eight weeks of parcourse training. In the selected muscular endurance value was lesser than table value of 2.58 and it shown the insignificant difference in the pre and post tests value.

### Comparisons of mean difference on muscular endurance of experimental group



**Figure II**

### Comparisons of mean difference on muscular endurance of control group



### Conclusion

This training increase the ability and efficiency of the muscles work under fatigue condition, bones and joints became stronger, better muscle tone, improve the posture, and reduce the risk of injury. It is need for all the people to do the daily activities easily and in sports it is the ability to do activities for long time without fatigue. Muscular endurance was significantly improved due to eight weeks of parcourse training among college boys. The findings are line with the findings of Palanisamy and Dhanarai (2013), and Manikandan (2014).

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