



Effect of Contrast Training on Performance Related Component in Muscular Strength of Weight Lifters

Dr. N. Senthilkumar

Physical Director, Arulmigu Arthanareeswarar Arts and Science, Thiruchengodu, Namakkal.

ABSTRACT

Contrast training involves performing a strength exercise followed by a power movement similar to the strength movement. Examples: a Deadlift paired with a Broad Jump, or Bench Press paired with a Plyometric Pushup. This training method develops strength, and explosive power. The present study is examined to the effect of contrast training on performance related component in muscular strength. The research scholar reviewed the available literature pertaining to the contrast training, from books, journals, periodicals, magazines and research papers. There were studies proved that the contrast training had positive effects on certain game performance related component in muscular strength of school level Muscular strength. The age group 15 – 18 and selected Namakkal region, Tamilnadu, India school level Muscular strength. Statistically significant improvements in standard scores in muscular strength was comparable between the three groups of Muscular strength. Muscular strength improved by 2.16 in contrast group, 2.06 in the control group. The research on short - duration intervention in establishment weight lifters may help to organize the role of contrast in conventional Muscular strength to maintain proper alignment and posture during movement for training.

KEY WORDS: Physical fitness, muscular strength, Contrast training

INTRODUCTION

Contrast training involves performing a strength exercise followed by a power movement similar to the strength movement. Examples: a Deadlift paired with a Broad Jump, or Bench Press paired with a Plyometric Pushup. This training method develops strength, and explosive power.

Contrast training consists of the use of high and low loads in the same strength training session. Specifically, sets of a high force, near maximal lift are performed before completing sets of a low-force, high velocity lift.

Contrast training is an exercise method that can enhance your neuromuscular efficiency, or the ability of your nervous system to communicate quickly and effectively with the muscles you use during a run. This effect is achieved by first priming the fast-twitch muscle fibres with a few reps of a heavy lift.

METHODOLOGY

The Methodology for the present investigation is on the effect of contrast training on performance related component in muscular strength of weight lifters. The purpose of study 30 male football students selected from various schools in Namakkal district, TamilNadu. Their age ranges between 15 to 18 years .the subjects were randomly assigned into two groups, namely experimental group I (contrast training) and control group. In order to make sure the full cooperation from the subjects, the scholar had a meeting with them and explained the purpose of the research. It was made clear by explanation in order to ascertain that there was no uncertainty among the players regarding the effort, which they had to put in for the successful completion of this study. Experimental group I participated for a period of eight weeks contrast training and control group have no any specific training. The subjects were tested on selected criterion variable of muscular strnegth before the training and after 8 weeks of training.

TRAINING PROCEDURE

Experimental Group-I undertake contrast training and the control group was un explored to any specific training programme. The experimental treatments namely contrast training was administrated for duration of eight weeks and the number of session per week was confined to three alternative days and each session lasted 60 minutes.

STATISTICAL TECHNIQUE

The collected data from the two groups prior to and after the experimental treatments on selected variables was muscular strength were statistically analyzed by using the statistical technique of analysis of covariance (ANCOVA). Whenever the 'F' ratio for adjusted post-test means was found to be significant, scheffe's post hoc test test was followed as a post hoc test to determine which of the paired means difference was significant. In all the cases 0.05 level of confidence was fixed as a level of confidence to test the hypotheses.

RESULTS AND ANALYSIS

The influence of independent variables on each of the criterion variables is analyzed and presented below.

The training period was limited to eight weeks. The dependent variables selected for this study was health related variable of muscular strength. All the subjects were tested prior to and immediately after the experimental period on the selected dependent variables.

The data obtained from the experimental groups before and after the experimental period were statistically organized with dependent 't'-test and Analysis of covariance (ANCOVA). Whenever the 'F' ratio for adjusted post-test means was found to be outstanding performance study. The Scheffe's Post hoc test was organised to determine the paired mean differences. The level of confidence was fixed at 0.05 level for all the cases.

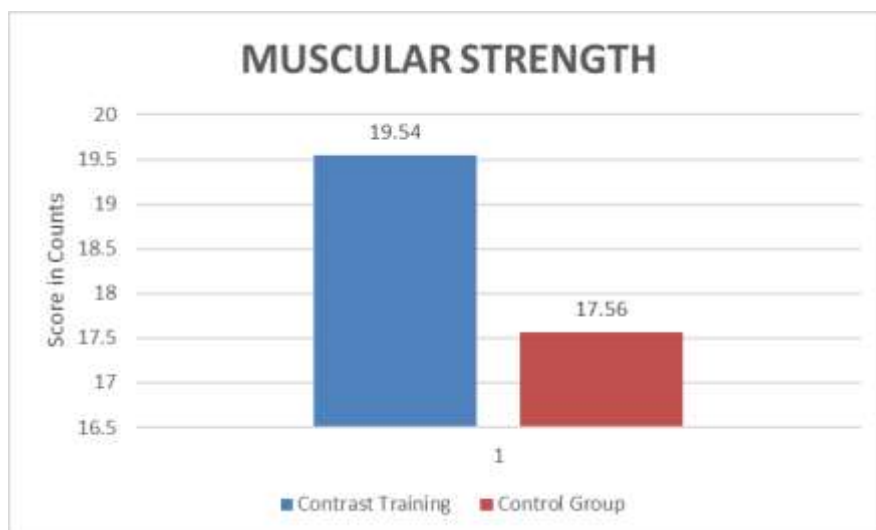
TABLE – 1

ANALYSIS OF COVARIANCE AMONG CONTRAST TRAINING GROUP I AND CONTROL GROUP ON MUSCULAR STRNEGTH

	Contrast training Group	Control Group	Source of Variance	Sum of square	df	Mean square	F-value
Pre test Mean	17.93	17.06	Between	5.633	1	5.633	1.88
			Within	83.867	28	2.995	
Post test Mean	19.93	17.20	Between	56.033	1	56.033	19.77*
			Within	79.333	28	2.833	
Adjusted post mean	19.54	17.58	Between	27.027	1	27.027	57.28*
			Within	12.739	27	0.472	

FIGURE – 1

THE ADJUSTED POST TEST MEAN VALUES OF CONTRAST TRAINING GROUP I AND CONTROL GROUP ON MUSCULAR STRENGTH



CONCLUSION

The findings of the study showed that there was a statistically significant improvement in the health related variable of muscular strength as compared to control group.

1. The results of the study shows that the experimental group-I that had undergone contrast training group, improved health related variable in muscular strength of weight lifters.

RECOMMENDATIONS

It is recommended that coaches and physical educators in the game of weight lifters should give due to include contrast training in their training schedules.

In the physical exercise, while designing the training programme the effect of varied training modalities is explained on positively on physical fitness parameters of muscular strength, the physical education teachers and coaches can prefer this type of training so as to achieve aim in time.

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