

Effect of General Specific and Combined Fitness Training on Muscular Endurance Performance Variables among Football Players

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Abstract – The present study was undertaken to “Effect of General Specific and Combined Fitness Training on muscular endurance performance among Football Players” for the purpose of the study sixty male football players were selected from in and around Guntur District of Andhra Pradesh and their age ranged from 18 to 21 years. The subjects chosen for the study were divided into four equal groups and designated as experimental group ‘A’ experimental group ‘B’ experimental group ‘C’ and control group ‘D’. general fitness training were given to group ‘A’ Specific fitness training were given to group ‘B’ combined fitness training were given to group ‘C’ and the control group ‘D’ were restricted to participate in any of the fitness training. The fitness training programmes were given for a period of twelve weeks. The obtained data’s were analysed by Analysis of Covariance and which was further subject of Scheffe’s Post hoc test, wherever the F-Ratio was found significant. The result of the study revealed that the General fitness, Specific fitness and combined fitness training programme were significantly increased muscular strength and endurance, among football players.

Keywords: General Fitness -Specific Fitness-Combined Fitness Training –Muscular Endurance Football Players.

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INTRODUCTION

Perfect and effective movements almost in all the sports depend on the bio motor abilities. Motor abilities are involve in all the sporting activities including soccer. In fact it determines the level of performance in any sports. In all the sports, combination of three major motor abilities components such as speed, strength and endurance, lead to various result in sports. The cooperation of motor abilities components to reach high and perfect performance level in sports. (Bompa, 1999).

“Despite this fact strength and conditioning programme for soccer are often neglected or out dated .Except at the professional level many athletes and coaches still focus only on skill development and endurance training and ignore the other important elements of fitness such as strength and strength endurance training speed power flexibility, warming up and cool down training”.

Statement of the problem

The aim of this study was to find out the effect of general specific and combined fitness training on muscular endurance performance among football players.

HYPOTHESIS

1. It was hypothesized that there may be significant improvement on muscular endurance of football players due to the effect of general physical fitness training, specific fitness training and combined training.
2. It was hypothesized that combined general and specific physical fitness training will be superior to isolated general fitness training and specific fitness training.

METHODOLOGY

The purpose of the study was to find out the “effect of general specific and combined fitness training on muscular endurance performance among football players”. Sixty male football players were selected as subjects in and around Guntur District of Andhra Pradesh and their age ranged from 18 to 21 years. They were divided into four groups each group consists of fifteen subjects. Three experimental groups and one control group namely general fitness training, specific fitness training, combined general and specific fitness training and control group. The fitness training programme were given for a period of twelve weeks. The obtained data’s were analyzed by using Analysis of Covariance and which was further subject of Scheffe’s Post hoc test, wherever the F-ratio was found significant at 0.05 level of confidence.

TABLE – I

ANALYSIS OF CO VARIANCE ON MUSCULAR STRENGTH AND ENDURANCE (BENT KNEE SIT-UPS) BETWEEN GROUPS

Test	Group	GFTG	SFTG	GFTG SFTG	CG	SOV	SOS	df	MSOS	'F' Ratio
Pre	Mean	25.73	26.60	26.07	25.53	B	9.783	3	3.261	0.323
	S.D	3.28	3.43	2.71	3.22	W	565.2	56	10.09	
Post	Mean	29.80	30.13	33.73	25.80	B	473.5	3	157.8	17.014*
	S.D	3.00	3.02	2.71	3.41	W	519.5	56	9.28	
Adjusted Post Test Mean	Mean	29.99	29.67	33.67	26.13	B	425.23	3	141.74	38.39*
						W	203.09	55	3.69	

**Significant at 0.05 level of confidence
F-ratio at 0.05 level of confidence for 3 and 55 (df) =2.77*

The above table I shows that the obtained ‘F’ ratio in pre-test (F=0.323, P>0.005) among four groups found to be insignificant in muscular strength and endurance. Further it can be seen that significant differences exist in post-test (F=17.014, P<0.005) and adjusted post-test (F=38.39, P<0.05). Based on the result of the study reveals that three experimental groups significantly improved in muscular strength and endurance in football due to the twelve weeks of general fitness training group, specific fitness training group and combined fitness training group when compare with control group.

TABLE – II

Scheffe’s Post Hoc Test for the Differences among Paired Means of Groups on Muscular Strength and Endurance (Bent Knee Sit-Ups)

MEANS OF				Paired Mean Difference	Sig	CI Value
GFTG	SFTG	GFTG SFTG	CG			
29.99	29.67			0.32	.657	2.016
29.99		33.67		3.68*	.000	2.016
29.99			26.13	3.86*	.000	2.016
	29.67	33.67		3.86*	.000	2.016
	29.67		26.13	4.00*	.000	2.016
		33.67	26.13	7.54*	.000	2.016

**Significant at 0.05 level of confidence*

The above table II shows that the significant differences exist between the GFTG & GFTGSFTG, GFTG & CG, SFTG & GFTGSFTG, SFTG & CG, GFTGSFTG & CG, whereas in case of GFTG & SFTG found insignificant paired mean differences at 0.05 level of confidence.

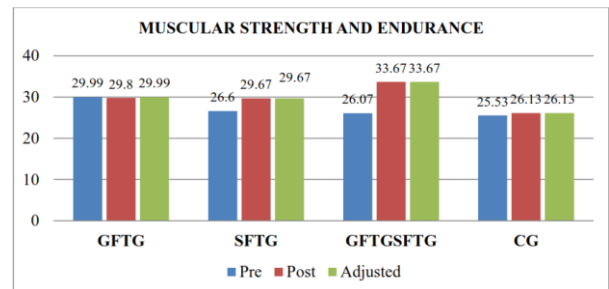


Figure 1: Bar Diagram Shows the Mean Values on Muscular Strength and Endurance (Bent Knee Sit-Ups)

DISCUSSION ON HYPOTHESES

- ▶ In the first hypothesized mention that may be significant improvement on muscular endurance of football players due to the effect of general physical fitness training, specific fitness training and combined training. Hence research first hypothesis accepted.
- ▶ In the second hypothesized mentioned that may be the combined general and specific physical fitness training will be superior to isolated general fitness training and specific fitness training. Hence research second hypothesis accepted

CONCLUSIONS

Based on the result of the study the following conclusions were drawn.

1. The General fitness training group, specific fitness training group and combined

training group had shown significantly improvement muscular strength and endurance and of football players when compared with control group.

2. The combined training group had shown better than the General fitness training group, specific fitness training group and control group on muscular endurance performance variables of football players.
3. It was suggested that football coach to implement combined training in their training program to improve the muscular endurance of football players.

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