ISOLATED AND COMBINED EFFECT OF FARTLEK, WEIGHT AND PRANAYAMA TRAINING PACKAGES ON SELECTED PHYSICAL VARIABLES AMONG FOOTBALL PLAYERS

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ABSTRACT

This study was designed to investigate the isolated and combined effect of fartlek, weight and pranayama training packages on selected physical variables among football players. To achieve the purpose of the study (N=80) eighty men football players were selected from the affiliated colleges of Bharathidasan University, TamilNadu, India as subjects. The age of the subjects ranged from 18 to 23 years. The selected subjects were divided into four equal groups (N=20). Group I underwent fartlek training, Group II underwent weight training, Group III underwent pranayama training and Group IV acted as control group who did not undergo any specialized training program other than their daily routine. The physical variables such as speed, agility, explosive strength and muscular endurance were selected as dependent variables and they were assessed by 50 yards dash, shuttle run test, bent knee sit-ups and vertical jumps respectively. The subjects were concerned with their particular training for a period of twelve weeks, three days per week on alternative days. The collected data from three groups prior to and immediately after the training programme on selected criterion variables were statistically analysed with analysis of covariance (ANCOVA). The level of confidence was fixed at 0.05 for all the cases to test the hypothesis. The result of the study reveals that the fartlek, weight and pranayama training packages groups had achieved significant improvement on selected the physical variables such as speed, agility, explosive strength and muscular endurance of men football players.

KEYWORDS: Fartlek Training, Weight Training and Pranayama Training, Speed, Agility, Explosive Strength and Muscular Endurance.

INTRODUCTION

Fartlek training is running with intensity according to the requirement of the athlete and the dictates of the terrain. The athlete will use a terrain which is undulated and makes varying demands upon him (ex. Hills, woodland, ploughed land, sand) like the alternating pace method with anaerobic period that provides a string stimulus for the improvement of VO2max. In addition, the demands of terrain stimulate strength, endurance, development, and proprioceptive balance adjustment of ankles, knees and hip **(Doyle, (2017).**

Yoga is an exact science. It is a perfect, practical system of self-culture. It is the discipline of the mind, senses and the physical body. It helps the student to attain perfect concentration of the mind, ethical perfection, moral excellence and spiritual calmness. It is the master-key to unlock the realms of Peace and Bliss, Mystery and Miracle. Yoga had its genesis in the wandering ascetics who sought the solitude of the forests to practice this ancient science and then imparted their knowledge to the ardent students (mumuksu) who lived in their ashrams. The ancient yogi's been possessive about this art form and did not make any effort to popularize yoga. The yogic postures and the subsequent stages of yoga were handed down only to the deserving students. Hence, this science remained limited to the confines of the forests or remote caves **(Mohan, 2002).**

Weight training program is one of the fine decisions to make for your health, well-being, physical, and mental performance. Weight training on an everyday foundation improves your strength, endurance, confidence, appearance, health, longevity, and pleasant of daily living. Consistent weight training helps limit your stress, control your weight, support your bones, decrease your chance of injury, and, gives you an aggressive aspect in all components of life **(Narasimham, 2009).**

METHODOLOGY

To achieve the purpose of the study (N=80) eighty men football players were selected from the affiliated colleges of Bharathidasan University, TamilNadu, India as subjects. The age of the subjects ranged from 18 to 23 years. The selected subjects were divided into four equal groups (N=20). Group I underwent fartlek training, Group II underwent weight training, Group III underwent pranayama training and Group IV acted as control group who did not undergo any specialized training program other than their daily routine. The physical variables such as speed,

agility, explosive strength and muscular endurance were selected as dependent variables and they were assessed by 50 yards dash, shuttle run test, bent knee sit-ups and vertical jumps respectively. The subjects were concerned with their particular training for a period of twelve weeks, three days per week on alternative dayes. The collected data from three groups prior to and immediately after the training programme on selected criterion variables were statistically analyzed with analysis of covariance (ANCOVA). The level of confidence was fixed at 0.05 for all the cases to test the hypothesis.

Table 1: Computation of Analysis of Covariance of Means of Fartlek and Weight Training with Pranayama Training and Control Group on Speed, Agility, Muscular Endurance, Explosive Strength. (In Seconds and Numbers).

Variables	Test	Fartlek Training	Weight Training	Pranayama Training	Control Group	Source of Variance	Sum of Square	df	Mean Squares	'F' Ratio
Speed	Pre Test	8.21	8.25	8.19	8.20	Between	0.0325	3	0.0108	1.67
						Within	0.3640	76	0.0065	
	Post Test	7.94	8.04	8.10	8.19	Between	0.4840	3	0.1613	25.86*
						Within	0.3493	76	0.0062	
	Adjusted Post Test	7.94	8.01	8.12	8.20	Between	0.5736	3	0.1912	103.02*
						Within	0.1021	75	0.0019	
Agility	Pre Test	15.53	15.51	15.51	15.52	Between	0.0040	3	0.0013	0.03
						Within	2.3520	76	0.0420	
	Post Test	14.93	15.21	15.41	15.50	Between	2.8193	3	0.9398	20.40*
						Within	2.5800	76	0.0461	
	Adjusted Post Test	14.92	15.22	15.41	15.50	Between	2.9705	3	0.9902	215.03*
						Within	0.2533	75	0.0046	
Explosive Strength	Pre Test	31.85	33.60	34.55	31.80	Between	8.033	3	4.017	1.92
						Within	1506.55	76	26.431	
	Post Test	36.45	43.45	42.55	34.15	Between	938.53	3	46.9	15.58*
						Within	1716.450	76	30.113	
	Adjusted Post Test	36.64	43.62	41.52	34.38	Between	800.43	3	400.22	31.43*
						Within	712.97	75	12.73	
Muscular Endurance	Pre Test	42.06	41.66	41.13	41.56	Between	7.13	3	2.38	0.38
						Within	347.60	76	6.21	
	Post Test	44.53	46.33	48.00	41.53	Between	344.60	3	114.87	29.13*
						Within	220.80	76	3.94	
	Adjusted Post Test	44.21	46.27	48.27	41.63	Between	362.17	3	120.72	80.09*
						Within	82.91	75	1.51	

*Significant at 0.05 level of confidence. (Table value with df 3 and 76 and 3 and 76 are 2.77 respectively).

The pre, post-test and adjusted post-test mean values of speed on fartlek training group (FTG), weight training group (WTG), pranayama training group(PTG) and control group (CG) were 8.21,7.94,7.94; 8.25,8.04,8.01; 8.19,8.10,8.12 and 8.20,8.19,8.20 respectively.

The pre, post-test and adjusted post-test mean values of agility fartlek training group (FTG), weight training group (WTG), pranayama training group(PTG) and control group (CG) were 15.53,14.93,14.92; 15.51,15.21,15.22; 15.51,15.41,15.41 and 15.52,15.50,15.50 respectively.

The pre, post-test and adjusted post-test mean values of explosive strength on fartlek training group (FTG), weight training group (WTG), pranayama training group(PTG) and control group (CG) were 31.85,36.45,36.64; 33.60,43.45,43.62; 34.55,42.55,41.52 and 31.80,34.15,34.38 respectively.

The pre, post-test and adjusted post-test mean values of muscular endurance on fartlek training group (FTG), weight training group (WTG), pranayama training group(PTG) and control group (CG) were 42.06,44.53,44.21; 41.66,46.33,46.27; 41.13,48.00,48.27 and 41.56,41.53,41.63 respectively.

The adjusted post-test 'F' ratio values of speed, agility, explosive strength. muscular endurance was 103.2, 215.03, 31.43 and 80.09 respectively. The obtained 'F' values of adjusted post-test were greater than the table value of 2.77. Hence it was proved that there were significant improvements on speed, agility, explosive strength and muscular endurance among men football players.

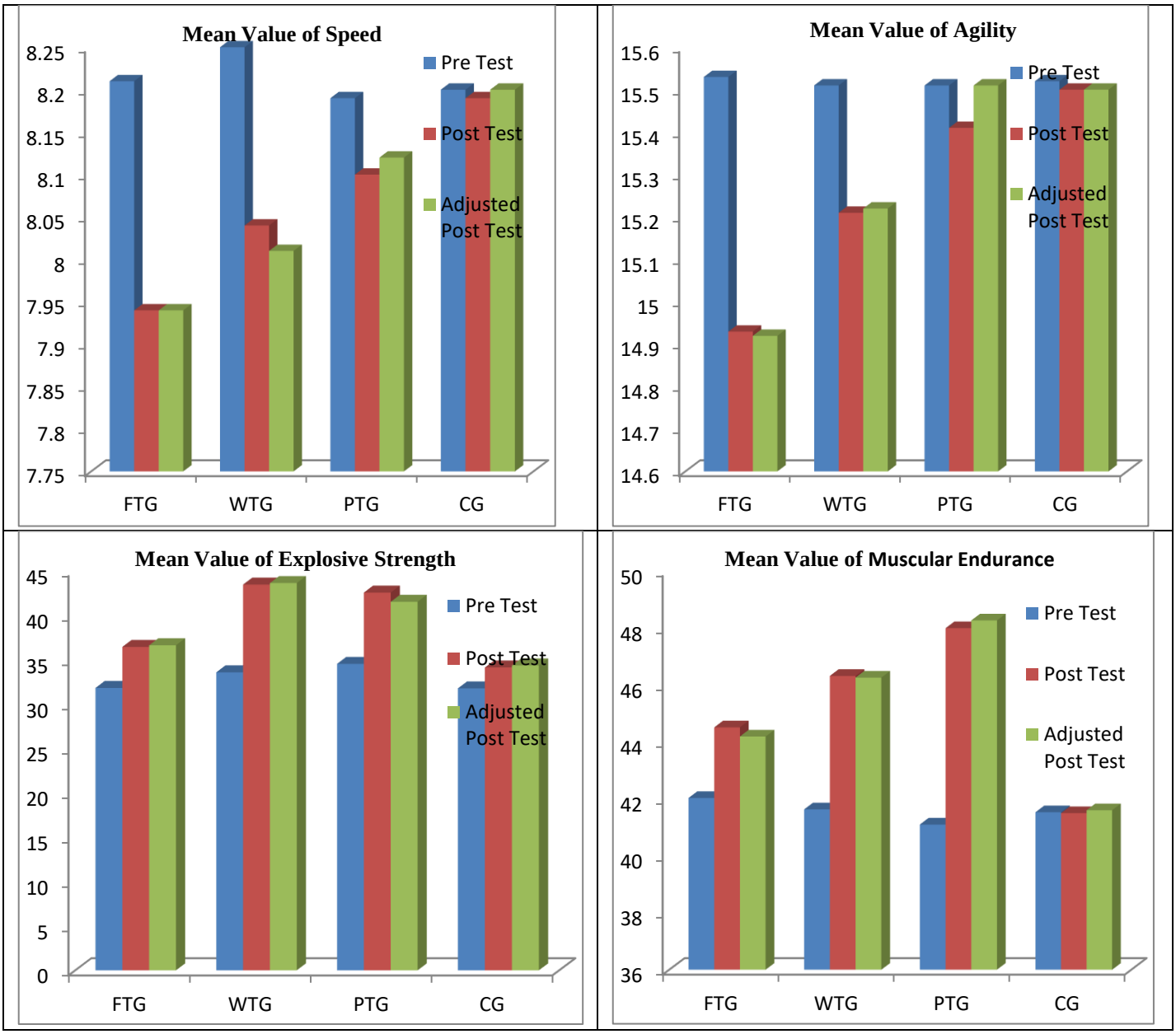

Figure-1: Pre, Post and Adjusted Post Test Means of Fartlek and Weight Training with Pranayama Training and Control Group on Speed, Agility, Explosive Strength and Muscular Endurance

DISCUSSION ON FINDINGS

The result of the study indicates that the experimental group namely as fartlek, weight and pranayama training packages groups had significantly improved in the selected dependent variables such as speed, agility, explosive strength and muscular endurance. The improvement caused by fartlek and weight training with pranayama training packages. The results of the studies are in line with the studies of Rajalakshmi, (2019), Muniyappan, (2019), Vallimurugan, (2019), Sureshkumar, (2023).

CONCLUSIONS

The experimental groups namely as fartlek, weight and pranayama training packages groups had achieved significant improvement on selected the physical variables such as speed, agility, explosive strength and muscular endurance when compared to control group.

It was concluded that fartlek training shown better improvement when comparing to the weight training and pranayama training groups on selected the physical variables.

It was concluded that college level player should practice fartlek training, weight training and pranayama training for positive enhancement of playing.

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